ePowerSwitch 8XM R2



User guide



Version 09/2009

www.neol.com

© Copyright by NEOL S.A.S - 4 Rue Nationale, 67800 BISCHHEIM, France

Printed in France

All rights reserved. No part of this documentation, accompanying software or other components of the described product may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose other than the personal use of the purchaser without the express written permission of NEOL S.A.S.

This documentation, the ePowerSwitch 8XM, its peripherals, accessories and accompanying software were produced with great care, yet errors are possible.

NEOL S.A.S assumes no responsibility for errors within the documentation, the hardware or the software. NEOL S.A.S reserves the right to change programs or the documentation from time to time without informing the user, errors and omissions excepted.

Trademarks

Neol and ePowerSwitch are registered trademarks of NEOL S.A.S. All other brand names and product names used in this book are trade names, service marks, trademarks, or registered trademarks of their respective owners.



CONTENTS

SAFETY INSTRUCTIONS: To be read before use!	3
1. DESCRIPTION	4
1.1 Diagram	4
1.2 Package list	7
2. INSTALLATION	8
3. CONFIGURATION	9
3.1. Configuration through the LAN using the Finder program	9
3.2. Configuration through an RS232 Terminal connection	11
3.3. Configuration through the LAN using a standard Browser	11
3.3.1. General / IP configuration	12
3.3.2. General / System time	14
3.3.3. General / SMTP	15
3.3.4. General / SNMP	16
3.3.5. General / Tools	17
3.3.6. Settings / Accounts	18
3.3.7. Settings / Groups	20
3.3.8. Settings / Peripherals	22
3.3.8.1. Settings / Peripherals - ePowerSwitch 8XM	24
3.3.8.2. Settings / Peripherals - ePowerSwitch Satellite	26
3.3.8.3. Settings / Peripherals - Analog inputs	30
3.3.8.4. Settings / Peripherals - Digital Inputs	33
3.3.8.4.1. Digital Input Modules	33
3.3.8.4.2. Temperature and proximity sensors	36
3.3.8.4.3. PUSN BUTTON	38
3.3.8.5. Settings / Peripherals - AC Current Probe	40
3.3.8.6. Settings / Peripherals - Energy Meter	42
3.3.9. Settings / Rules	44
3.3.9.1. Settings / Rules - Schedule Rule	40
3.3.9.2. Settings / Rules - Ping Monitoring Rule	49
3.3.9.3. Settings / Rules - Scan Monitoring Rule	52
3.3.9.4. Settings / Rules - Power Supply Monitoring Rule	50
3.3.9.5. Settings / Rules - Digital Input Monitoring Rule	00
3.3.9.0. Settings / Rules - Analog Input Monitoring Rule	61
2.2.11 Mise / Culturi Fallel	65
3.3.11. Wise / Rule Faller	66
3.3.12. Misc / Log Sottings	67
	68
4. FOWER OUTLET CONTROL AND FERIFIERALS STATUS	70
5.1 Sending status information and sensor values using rules	70
5.2 Ping and Scan Methods	71
5.3 Technical Data	72
5.4 Commonly used Ports	72
5.5. Syston Messages: Severity Level Definitions	72
	75
	10

SAFETY INSTRUCTIONS: To be read before use!



NOTE

- The ePowerSwitch devices can only be installed by qualified people with the following installation and use instructions. The manufacturer disclaims all responsibility in case of a bad utilization of the ePowerSwitch devices and particularly any use with equipments that may cause personal injury or material damage.
- This equipment is designed to be installed on a dedicated circuit that must have a circuit breaker or fuse protection.
- The electrical power sockets used to plug the power cords of the ePowerSwitch devices must be close to the ePowerSwitch devices and easily accessible.
- Check that the power cords, plugs and sockets are in good condition.
- The ePowerSwitch devices can only be connected to three-wire 230 VAC (50-60Hz) sockets.
- Always plug the ePowerSwitch devices into properly grounded power sockets (two poles plus ground).
- Never exceed 10 Amp total load for each group of 4 power outlets of an ePowerSwitch device.
- The ePowerSwitch devices are intended for indoor use only. Do NOT install them in an area where excessive moisture or heat is present.
- Always disconnect the 2 (two) power cords of the ePowerSwitch device if you want to intervene on the ePowerSwitch device or on the equipment powered from the ePowerSwitch device.
- The power outlets of the ePowerSwitch devices are not circuit breakers! If you want to intervene on equipments connected to an ePowerSwitch device you must disconnect these equipments from the ePowerSwitch device.
- Do NOT attempt to disassemble the ePowerSwitch devices, they contain potentially hazardous voltages.
- The ePowerSwitch devices contain no user serviceable parts and repairs are to be performed by factory trained service personnel only.
- Always use a shielded cable for the Ethernet connection.

1. DESCRIPTION

ePowerSwitch 8XM is a power control unit with a built-in Web server, an Ethernet and a RS232 connection. It enables to control the power supply of 8 power outlets through an Ethernet connection. The number of controlled power outlets can be extended up to 136 by cascading up to 16 ePowerSwitch 8XS to the Master. It supports a maximum load of 2x10A through 2 separate power inputs.

This high security unit offers HTTPS protocol with Web browsers that support SSL version 2 or 3.

It also supports plenty of control options to increase the security of your facilities and reduce unforeseen downtimes of your equipment. Its modular conception allows to monitor many sensors and trigger emergency actions like alert sending via SNMP traps, Email or Syslog messages. It is able to record all events into a time-stamped log file.

1.1 Diagram

The front panel of the ePowerSwitch 8XM (Master)



A 1 2 3 4 (LEDs)

- A Green. Lights up when Power applied on Group A
- 1 Red. Status of power outlet 1 (On/Off)
- 2 Red. Status of power outlet 2 (On/Off)
- 3 Red. Status of power outlet 3 (On/Off)
- 4 Red. Status of power outlet 4 (On/Off)

10/100 (RJ45 Connector)

Network connection 10/100 Mbits/sec

Link (LED)

Off = Network connection not detected

On = Network connection detected

Flashing = the device is sending or receiving data over this port

100 (LED)

Off = 10 Mbits/sec connection On = 100 Mbits/sec connection

RS232 (SUB-D 9F Connector)

Serial port RS232 with DB-9 female connector

Pinout 2 = TxD

3 = RxD

5 = Gnd

xBus

The RJ45 connector is used for cascading ePowerSwitch devices and xBus peripherals Maximal TOTAL line length: 200 meters

Term (RS485 Termination DIP Switch)

The xBus interface (RS485) has built-in termination resistors. To enable these resistors slide the two DIP Switch to the ON position (down).

Termination should be enabled at the two end stations on an RS485 network.

No more than two stations should be terminated on an RS485 network.

SB56781234 (LEDs)

- S Status
 - On = ePowerSwitch 8XM software is loaded and functional
 - Off = power default
 - 1 time repeatedly = power on but not ready
 - 2 times repeatedly = waiting on IP address from DHCP server
 - 3 times repeatedly = SSL key computing in progress (takes several minutes!!!)
 - 4 times repeatedly = System error (contact the manufacturer)
- B Green. Lights up when power applied on Group B
- 5 Red. Status of power outlet 5 (On/Off)
- 6 Red. Status of power outlet 6 (On/Off)
- 7 Red. Status of power outlet 7 (On/Off)
- 8 Red. Status of power outlet 8 (On/Off)
- 1 Yellow. Status of dry contact output 1 (Open/Closed)
- 2 Yellow. Status of dry contact output 2 (Open/Closed)
- 3 Yellow. Status of dry contact output 3 (Open/Closed)
- 4 Yellow. Status of dry contact output 4 (Open/Closed)

I/O (SUB-D 25F Connector)

Dry Contacts: 4 Outputs and 8 Inputs Do NOT exceed 24VDC – 20 mA (see Annexe Table for the Pin configuration)

12 VDC AUX Power Supply

The Web server can be powered either by power input A or power input B.

To increase the operational safety of the Web server, an auxiliary power supply (12 VDC / 300 mA) can be connected to this input (double insulated, ie. not connected to ground).

The back panel of the ePowerSwitch 8XM



1.2 Package list

The following items are included:



- 1 ePowerSwitch 8XM^{R2} 19"
 1 power adapter 12 VDC
 2 power cables, 230 V / 10 Amp, length 1.80 Meters
- □ 1 RJ45 M/M cable, 2 Meters
- □ 1 serial cable SUB-D 9 points M/F, 1.80 Meters
- □ 1 quick installation guide
- □ 1 CD with User Guide, Quick Start Guide and Windows configuration program

2. INSTALLATION

Remark:

Make sure that the ePowerSwitch 8XM is powered off.

Connection instructions

- 1. Use a shielded RJ45 network cable to connect your ePowerSwitch 8XM to the network.
- 2. Use appropriated three-wire power cords (two poles plus ground) to connect your electrical devices to the ePowerSwitch 8XM unit.
- 3. Plug the 2 power cables into 2 <u>grounded</u> sockets. The power supply LED of group A and of group B light on to confirm that power is on.
- 4. You can now configure the ePowerSwitch 8XM by following the indications of the chapter "Configuration of the ePowerSwitch 8XM".

3. CONFIGURATION

To use the ePowerSwitch 8XM on your network, you must first configure its network parameters. Ask your network administrator for the parameters to use.

There are three methods to configure the network parameters of the ePowerSwitch 8XM:

3.1. Configuration through the LAN using the Finder program

It is the simplest and fastest configuration method if you use Windows as operating system. It allows to configure your ePowerSwitch 8XM <u>through your local network</u> even if its network parameters are not compatible with those of your PC.

- 1. Start the Finder.exe program contained on the CD-ROM.
- 2. Open the File menu and choose **SCAN** (or click on the first left button in the tool bar) to discover the ePowerSwitch 8XM connected on your LAN.

jile <u>H</u> elp				
🔕 🎕 🕻				
	1			
lame		Туре	IP Address	MAC Address
Master Name				INAC Address

3. Open the File menu and choose **CONFIGURE** (or click on the second left button in the tool bar) to configure the network parameters.

Properties	
General	
Use the following IP Address	8
DHCP	
IP Address :	192.168.100.202
Subnet Mask :	255 255 255 0
Gateway :	0.0.0
DNS1:	0.0.0
DNS2:	U.U.U.U
Version	
Version ·	3.1.0.0 Alpha
Configuration	
Finder authorized :	M
HTTPS Access	0
HTTP Access	•
HTTP Port Number	80
	OK Cancel

This page enables to define all IP parameters of the ePowerSwitch 8XM device and displays the version of the Firmware. The HTTP protocol is enabled and the Finder program is authorized at factory settings.



!!! To achieve the highest security level we suggest to disable the configuration using the Finder program after the first installation.

DHCP:

Check this box is you want to obtain the IP address, the subnet mask and the default gateway for your ePowerSwitch 8XM via DHCP.

Use of DHCP (Dynamic Host Configuration Protocol) requires a DHCP host to be set up on the network.

IP Address:

IP address of the ePowerSwitch 8XM, default is 192.168.100.200.

Subnet Mask:

Subnet Mask of the ePowerSwitch 8XM, default is 255.255.255.0.

Gateway:

Generally the address of your router, default is blank.

DNS 1:

Primary DNS (Domain Name Server), default is blank.

DNS 2:

Secondary DNS, default is blank.

Version:

Firmware version of the ePowerSwitch 8XM

Finder authorized:

The Network parameters of the ePowerSwitch 8XM can be configured through a Local Area Network using the provided Finder Program. It is a simple and fast configuration method if you use Windows as operating system.

!!! The Finder Program is enabled as default value. For security reasons we suggest to disable the Finder program after the first configuration.

HTTP / HTTPS Access:

These options enable to choose between the standard HTTP and the HTTP over SSL protocol.

HTTPS encrypts and decrypts the page requests and page information between the client browser and the web server of the ePowerSwitch 8XM using a Secure Socket Layer (SSL). A URL beginning with HTTPS indicates that the connection is encrypted using SSL. SSL transactions are negotiated by means of a Key-based encryption algorithm between your browser and the web server of your ePowerSwitch 8XM.

The HTTP protocol is enabled as default value.

HTTP Port Number:

Port number: default is 80 (HTTP). Standard HTTP port is 80. Standard HTTPS port is 443.



3.2. Configuration through an RS232 Terminal connection

- 1. Use the provided RS232 cable to connect the ePowerSwitch 8XM to an available serial port of your PC.
- 2. Run a Terminal program such as Windows HyperTerminal.
- 3. Configure the appropriate serial port @ 9.600, n, 8, 1 and no flow control.
- 4. On your computer, press <ENTER> until the menu appears on your screen.
- 5. Press the "M" on your keyboard and follow the menu to configure the network parameters of your ePowerSwitch 8XM.

```
NETWORK INTERFACE PARAMETERS:
Should this target obtain IP settings from the network?[N]
Static IP address [192.168.1.250]?
Subnet Mask IP address [255.255.255.0]?
Gateway IP address [192.168.1.2]?
Primary DNS Server IP address [192.168.1.2]?
Secondary DNS Server IP address [0.0.0.0]?
MISCELLANEOUS:
Finder program enabled?[Y]
```

Configuration menu

3.3. Configuration through the LAN using a standard Browser

During the first installation, change temporarily the network settings of your PC according to the default network settings of the ePowerSwitch 8XM.

Factory network settings of the ePowerSwitch 8XM: IP Address: **192.168.100.200 - Port: 80** Gateway: **255.255.255.0** Default factory protocol is **HTTP !!!**

- 1. Open your Web browser and type following IP address: http://192.168.100.200/sysadmin.htm
- 2. Enter the administrator name and password (default for both = admin)
- 3. The home page appears, allowing you to configure all settings of your ePowerSwitch 8XM.

ineral Settings	Misc	Help				
Contiguration Sy	stem Time	SMTP	SNMP	Too	k	
🔁 IP Configura	ation					2
DHCP Client enabled						
IP Address		192,168,100	.200			
Subnet Mask		255,255,255	.0			
Default Gateway		0.0.0				
Primary DNS Server		0.0.0.0				
Secondary DNS Server	-	0.0.0.0				
Finder Program enable	J	ব				
HTTPS Access		0				
HTTP Access		c.	HTTP Port	80		
	DISCARD			ES		

3.3.1. General / IP configuration

This page enables you to define all the IP parameters of the ePowerSwitch 8XM.

ionoral Settings Misc	Hclp			
Configuration System Line	S SMIP	SNMP	Lools	
IP Configuration				2
DHCP Client enabled				
IP Address	192.168.100.200			
Subnet Mask	255.255.255.0			
Default Gateway	0.0.0.0	1		
Primary DNS Server	0.0.0.0	I		
Secondary DNS Server	0.0.0	I		
Finder Program enabled	V			
HTTPS Access	o			
HTTP Access	۲	HTTP PurL	80	

DHCP Client enabled:

Check this box is you want to obtain the IP address, the subnet mask and the default gateway for your ePowerSwitch 8XM via DHCP. Factory default setting for this option is disabled.

Use of DHCP (Dynamic Host Configuration Protocol) requires a DHCP host to be set up on the network.

IP Address:

IP address of the ePowerSwitch 8XM, default is 192.168.100.200.

If you use the https protocol and change the IP address, the system needs to compute new SSL keys. This operation takes several minutes and the LED marked "Status" on the case blinks 3 times repeatedly during all the process. During all this time, you cannot login. Subnet Mask:

Subnet Mask of the ePowerSwitch 8XM, default is 255.255.255.0.

Default Gateway:

Generally the address of your router, default is blank.

Primary DNS Address:

Primary DNS (Domain Name Server), default is blank

Secondary DNS Address:

Secondary DNS, default is blank

Finder Program enabled:

The Network parameters of the ePowerSwitch 8XM can also be configured through a Local Area Network using the provided Finder Program. It is a very simple and fast configuration method if you use Windows as operating system.

The Finder Program is enabled as default value.

!!!For security reasons we suggest to disable the Finder program after the first configuration. HTTP / HTTPS Access:

This option enables to choose between the standard HTTP and the HTTP over SSL protocol. HTTPS encrypts and decrypts the page requests and page information between the client browser and the web server of the ePowerSwitch 8XM using a Secure Socket Layer (SSL). A URL beginning with HTTPS indicates that the connection is encrypted using SSL. SSL transactions are negotiated by means of a Keybased encryption algorithm between your browser and the web server of your ePowerSwitch 8XM. The HTTP Protocol is enabled as default value.



!!!To achieve the highest security level we suggest to choose the HTTPS protocol.

HTTP Port:

Port number: default is 80 (HTTP). Standard HTTP port is 80. Standard HTTPS port is 443.

LOGOUT: Click "Logout" at the bottom of the page to exit the session without saving changes. DISCARD CHANGES: Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. APPLY CHANGES:

3.3.2. General / System time

The system time of the ePowerSwitch 8XM is used for synchronizing scheduling actions and to timestamp SNMP traps, Syslog information, e-mails and internal logs. The system time can be set manually with the browser time of the connected computer or can be automatically synchronized with one or two NTP timeservers.

ieral Sellinys	Misc	Help			
onfiguration Syst	em Time	SMTP	SNMP	Tools	
System Time					_
oystem mile					2
urrent System Time	T	ue 25 Aug 2009 11:	41:09		
e Browser Time	0	Sel System Tin	пы		
ac NIP Server	€ R	ofresh Lime 1 d	ay 🗖		
	P	nimary ntpi	ime.net		
	S	econdary ntpl	lime.org		
me Zone	2	(MTT01:00) Brusse	els, Copenhagen, Madr	id, Paris, Vilmius	•
aylight Saving Time	2	Month	Week Day	Hour Mi	nute
	S	tart Mar 💌 I	Last 🔽 Sun 🗖	02 💌 00	
	H	nd Oct 💌 I	ast 💌 Sun 💌	03 🔳 00	

Current System Time:

This field shows the current system time of the ePowerSwitch 8XM.

As the system time is displayed through the browser, a small difference (1 to 2 sec) can appear as compared to the exact hour. The system time is nevertheless correct.

Use Browser Time:

If you want to set the system time using the current Browser time of your PC, select this option and click on the "Set System Time" button.

Use NTP Server:

If you want to set the system time using an NTP timeserver, select this option, choose a refresh interval and enter the IP address of the timeserver you wish to use in the "Primary" field. The address of a second timeserver can be specified in the "Secondary" field. The secondary timeserver is optional and is used only if the primary timeserver is not available.

You can enter either the hostname (in that case you must have specified a DNS server on the IP configuration page) or the IP address of an NTP server. NTP uses port 123/UDP.

Time Zone:

Set the time zone corresponding to your location. The system clock will subsequently show local time. Without setting this, the system clock will show UTC/GMT time. Setting a time zone is only relevant if you are synchronizing with an NTP server.

Daylight Saving Time:

If you want to set Daylight Saving dates, check this box and specify the date you want to use.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.3. General / SMTP

You can setup the ePowerSwitch 8XM to send the logs to an email account and report all activities triggered by the rules defined by the administrator.

		ENIND	Turk	
	SMTP SMTP	SNMP	Tools	
SMTP Configu	uration			
				2
MTP Client enabled	П			
MTP Server Address				
MTP Port	25			
rom (c. mail Address)				



SMTP enabled:

Check this box if you want the ePowerSwitch 8XM to be able to send e-mails. **SMTP Server Address:**

In this field, enter the address of the e-mail server you want to use.

You can enter either the hostname (in that case you must have specified a DNS server on the IP configuration page) or the IP address of an NTP server. NTP uses port 123/UDP.

SMTP Port:

In this field, enter the Port Number you want to use, default and usual port is 25.

From (e-mail Address):

In this field, enter the e-mail address that ePowerSwitch 8XM messages will appear to come from.

The name can be from 1 to 64 characters long, and can contain alphanumeric characters. This should be a valid address (generally servers reject messages that don't have a valid from address).

Example:

yourname@yourmailserver.net

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.4. General / SNMP

The ePowerSwitch 8XM provides a built-in SNMP (Simple Network Management Protocol) agent, which enables you to manage the ePowerSwitch 8XM through SNMP-based network management systems. The ePowerSwitch 8XM MIB file enables to remotely read out the status of all power outlets and the values of all sensors (temperature, humidity, ambient light). It also enables to control individually all power outlets and all groups of power outlets. The MIB file is stored on the ePowerSwitch 8XM and can be downloaded from the General / Tools Page.

neral Settings	Misc	Help			
Configuration Sy	slem Time	SMTP	SNMP	Tools	
SNMP Confl	guration				2
NMP enabled	r	-			
iontact		ontect			
ame	r	ama			
ocation	1	assirian			
cad Community		ublic			
Inte Community		rivete			
rap Community		78.P			
rap Destination 1					
rap Destination 2					

SNMP enabled:

Check this box if you want to enable the SNMP protocol.

Contact:

In this field, enter the name you want to give to the Contact field. The name can be from 1 to 64 characters long, and can contain alphanumeric characters. Default name is "contact".

Name:

In this field, enter the name you want to give to the Name field. The name can be from 1 to 64 characters long, and can contain alphanumeric characters. Default name is "name".

Location:

In this field, enter the name you want to give to the Location field. The name can be from 1 to 64 characters long, and can contain alphanumeric characters. Default name is "location".

Read Community:

In this field, enter the name you want to give to the Read Community field. The name can be from 1 to 64 characters long, and can contain alphanumeric characters. Default name is "public".

Write Community:

Check this box if you want to be able to control the power outlets through a MIB browser. In the following field, enter the name you want to give to the Write Community. The name can be from 1 to 64 characters long, and can contain alphanumeric characters. Default name is "private".

Trap Community:

Check this box if you want to configure the ePowerSwitch 8XM SNMP agent to send traps to a community. In the following field, enter the name you want to give to the Trap Community. The name can be from 1 to 64 characters long, and can contain alphanumeric characters. Default name is "trap".

Trap Destination 1:

Check this box and enter the primary SNMP Server address the traps will be sent to.

Trap Destination 2:

Check this box and enter the secondary SNMP Server address the traps will be sent to.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.5. General / Tools

This page enables you to:

- download and save the current settings of your ePowerSwitch 8XM on your PC,
- upload an existing configuration file to your ePowerSwitch 8XM,
- restore the factory settings,
- download the ePowerSwitch 8XM MIB file on your PC.

eneral	Sellings	Misc	Help				
Configur	ation S	ystem Time	5M	тр	SNMP	Tools	
🔁 Тоо	ols						8
lave Sel	lings To Lo	cal Hard Driv	e	1	Save MIB To Loca	d Hard Drive	
580					Save MIB		
.uad Sel	lings From	Local Hard D	rive				
				Paronunr			
	d						
Lua							
Lua							
Lua (estore	io Lactory	Default Setti	ng«				
Loa (estore Resto	lo Lactory	Default Settu	ng«				
Loa (estore Resto	lo Lactory	Default Setti	ng«				

Save:

Click this button to save the current system settings onto your local hard drive.

Load:

Click this button and select a settings file you want to download to the ePowerSwitch 8XM.

Restore:

Click this button if you want to restore the factory default settings.

Save MIB:

Click this button if you want to download the ePowerSwitch 8XM MIB file onto your local hard drive.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

3.3.6. Settings / Accounts

This page is used to create, activate, deactivate, modify and delete up to 255 accounts.

Groups						
	Peripherals	Rules				
ounts		Ac	id a N	ew Account		2
User Name			•	Access	Edit	Delete
admin				Administrator	A	
	unts User Name admin	unts User Name admin	unts Ac User Name admin	unts Add a N User Name • admin	unts Add a New Account	unts Add a New Account

- To activate or deactivate an account, check or uncheck the corresponding checkbox.
- To modify an account, click on "Edit" next to the corresponding account.
- To delete an existing account, click on "Delete" next to the corresponding account.
- To create an account, click on "Add a New Account" on the right side of the page. A new page appears, allowing you to set all the parameters of the account.

Neol			eP	owerSwitcl	8XM R2
Accounts	s Misc Groups	Help	Rules		
Add a Ne	w Account				51
User Name					
Password					
Confirm Password					
Device	•	10: EPS 8XM demo		-	
		WA: Power Input A N WB: Power Input B N	lame .	-	
Inputs/Untouts		WX: Power Input Au DI1: Digital Input 1 N	k Namo ame	_	
infansy confines		012: Digital Input 2 No 013: Digital Input 3 No	ame ame		
		014: Digital Input 4 Na 015: Digital Input 5 Na	ame amo	•	
RLOCOLIT				e	
	DISCARD C		IPPLT CHANGE	0	

User Name:

In this field, enter the name you want to give to the user. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Password:

In this field, enter the password you want to give to the user. The password can be from 4 to 32 characters long, and can contain alphanumeric characters.

Confirm Password:

In this field, enter the password again.

Groups:

This field is used to add or remove groups to the current account.

To add Groups to the current account, press the Ctrl key and click on the displayed Groups. The selected Groups are marked dark blue and their IDs are listed at the right side of the Groups field.

This field appears only if you have already created at least one group (Settings/Groups Tab).

Device:

In this drop-down list, choose a device from which you want to add Inputs or Outputs to the current account.

Inputs/Outputs:

This field is used to add/remove Inputs or Outputs to/from the current account.

To add Inputs or Outputs to the current account, press the Ctrl key and click on the Inputs/Outputs of the device selected in the previous field. The selected Inputs/Outputs are marked dark blue and their IDs are listed at the right side of the Input/Output field.

The ePowerSwitch 8XM supports number of peripherals which are clearly identified by specific ID Codes.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.7. Settings / Groups

This page is used to create, modify and delete groups of power outlets which can be controlled by the ePowerSwitch 8XM. This functionality is particularly useful if you have to control the power supply of devices using redundant power supplies. You can create groups including several power outlets distributed on several ePowerSwitch 8XS devices.

eol					
neral Setti	nqs Misc	Help			
Accounts	Groups	Peripherals	Rules		
Groups				Add a New Group	2
Activated I	D ¢ Group Name			÷	Edit Delete
LOGOUT	DISCARD (CHANGES 💾 AF	PPLY CHANGES		

- To delete an existing group, click on "Delete" of the corresponding device.
- To add or remove power outlets to/from an existing group, click on "Edit" of the corresponding device.
- To deactivate a Group, uncheck the box "Activated" of the corresponding group.
- To add a new group, click on "Add a New Group" on the right side of the page. A new page appears, allowing you to set all parameters of the group.

Power	Switch	1	8XM R2	
meral Sellin	iys Misc	Help		
Accounts	Groups	Peripherals	Rules	
🔰 Add a N	ew Group			2
roup ID	1	G1		
Group Name	I			
levice	l	M0: ePowerSwitch 8XM 1 01: Power Outlet 1 Nam	Nama 💌	
ower Outlets		02: Power Outlet 2 Nam 03: Power Outlet 3 Nam 04: Power Outlet 4 Nam 05: Power Outlet 5 Nam 06: Power Outlet 6 Nam 08: Power Outlet 4 Nam 08: Power Outlet 8 Nam	6 6 6 6 6 6	
100001	UISCARD		PLT UNANUES	

Group Id:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each group of power outlets. All the ID Codes used to identify groups start with the letter "G".

Group Name:

In this field, enter the name you want to give to the selected group. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Device:

In this drop-down list, choose an ePowerSwitch from which you want to add power outlets to the selected group.

Power Outlets:

This field is used to add and remove power outlets to/from the group.

- To add power outlets to the group, press the Ctrl key and click on the power outlets of the ePowerSwitch selected in the field above. The selected power outlets are marked dark blue and their names are listed at the right of the field "Power Outlets".
- To remove a power outlet from the group, press the Ctrl key and click on the power outlet you wish to remove.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.8. Settings / Peripherals

The Peripherals page is used to enable and configure the xBus peripherals which have been connected to the ePowerSwitch 8XM. This page is also very useful to give an overview of all the peripherals which are or have been connected to the ePowerSwitch 8XM.

Accounter	Groups	Peripheral	e Dular							
Rorinhora	le									
Periphera	15						?			
Activated ID •	Гурс	٠	Name	•	Edit	Info	Ucicte			
M0	PowerSwitch		EPS 8XM demo		A	1				

Following xBus peripherals can be connected to the ePowerSwitch 8XM:

- 16 x ePowerSwitch Satellite 8-Port or 1-Port,
- 16 x EnergyMeter for real-time power consumption measuring,
- 16 x current probes,
- 32 x sensors (temperature, temperature and humidity and temperature and ambient light),
- 16 x Digital Input Modules with 16 digital inputs or 16 x push buttons or 16 x IR proximity sensors,
- any xBus Extenders,
- any xBus Optocouplers.

You can connect an xBus peripheral to the RJ45 connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain Connection).

Connecting an xBus peripheral to the ePowerSwitch 8XM:

- 1. Set the dip switches of the xBus peripheral so that the selected I/O address does not conflict with another peripheral already connected to the xBus (see user's guide of the corresponding peripheral).
- Do NOT connect the xBus cable (and the power cable if need be) before setting its DIP switches
 Do NOT use the same address for two different xBus peripherals
- 2. Using a standard RJ45 Network cable, connect the xBus peripheral to the RJ45 xBus connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM.

After connecting an xBus peripheral, you MUST enable it in the Peripherals Page:

- Open your browser and log in to the Administrator's Configuration Page (default: <u>http://192.168.100.200/sysadmin.htm</u>)
- 2. Enter the administrator name and password (default for both = admin).=> The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab.

If the peripheral is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of 1 to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.



The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another xBus peripheral connected to the ePowerSwitch 8XM, an address conflict occurs and the corresponding Edit and Info symbol of the previous connected peripheral will be replaced by a yellow warning triangle. In that case, disconnect your last connected peripheral, remove its power cable if need be, change the DIP switch settings to solve the address conflict and reconnect the peripheral. If the conflict is solved, all connected peripherals will appear on the Peripherals page and their Edit and Info Symbol will be red.
- The yellow warning triangle is also displayed to point out that a connected xBus peripheral can no longer be reached (for instance if a cable is disconnected).
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Accounts	- I	Groups	Perinhera	ls Vi	iles				
Accounts		Groups	Cripileru						
Perip	heral	s							?
Activated	ID ¢	Түре	÷	Name		÷	Edit	Info	Delete
1	MO	PowerSwitch		EPS 8XM			۵	A	
•	-51	ePowerSwitch	185	ePowerSwitc	h 1XS 1 Name		Â	Â	
	52	ePowerSwitch	8XS/32	Satellite 2 N	ame		Â		
7	53	Power Switch 8	3-Port	Power Switch 8-Port 3 Name		A	A		
×	-0	I Sensor		ESensor 1 N	ame		Â	Â	1
	TH2	TH Sensor		TH Sensor 2	Name		Â	▲	
	тлз	TA Sensor		TA Sensor 3	Name		۵	A	
	1194	IP Sensor		IP Sensor 4	Name		e	1	1
	DIM1	Digilal Inpul M	odule	Digilal Inpul	Module 1 Nan	ie	À	▲	
	PB2	Push-Button		Push-Button	2 Name		A	1	
7	CP1	AC Current Pro	ihe	AC Current P	rohe 1 Name		Â	Â	1
M	EM2	Energy Meter		Energy Mete	r 2 Name		À	▲	8
	т Ц			APPLY CH	ANGES				

The Peripherals page is used to configure all peripherals connected to the ePowerSwitch 8XM.

- To activate a peripheral, check the box "Activated" of the corresponding device.
- To deactivate a peripheral, uncheck the box "Activated" of the corresponding device. Even if the device remains physically connected to the ePowerSwitch 8XM, it will no longer be accessible by its authorized users.
- Note
- The ePowerSwitch 8XM cannot be deactivated.
- To remove a peripheral, click on the corresponding "Delete" button.
- A peripheral cannot be deleted if it belongs to a group or a rule. In that case, you will first have to delete it from the group or the rule.
- To know the Firmware version of a device, click on the corresponding "Info" button.
- To configure or modify the settings of a device, click on the corresponding "Edit" button.

3.3.8.1. Settings / Peripherals - ePowerSwitch 8XM

This page enables to label the device power supply inputs, the 8 digital inputs and 4 outputs located on the I/O Extension Module (option) and the 8 power outlets of the ePowerSwitch 8XM. Names of up to 32 alphanumeric characters in length are supported and appear in log files, Syslog messages, SNMP traps and Emails to avoid confusions.

- 1. Open you browser and log in to the Administrator's Page, (ex. http://192.168.100.200/sysadmin.htm).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings Tab, on the Peripherals Tab and then on the Edit symbol. Following new page appears, allowing you to define the labels.

bl		e	PowerSv	/itch	8XM R
aral	I Sellings Mi	sc Help			
	unts Group	ps Peripherals Rules			
e	PowerSwitch 8	XM			2
	Decidention	Nama			
	Device	ePowerSwitch 8XM Name			
	Santa				
Р	ower Supplies				
	Designation	Name			
L.	Power Inpul 1	Power Input A Name			
5	Power Input 2	Power Input D Name			
	Power Input 3	Power Input Aux Name			
U	ngital inputs				
	Decignation	Name			
	Digital Input 1	Digital Input 1 Name			
	Digital Input 2	Digital Input 2 Name			
	Digital Input 3	Digital Input 3 Name	_		
	Digital Inplit 4	Digital Input 4 Name	_		
	Digital Input 5	Digital Input 5 Name			
	Digital Input 6	Digital Input & Name	_		
	Digital Input V	Digital Input V Name	_		
	Digital Input 9	I/O Extension Module Name			
Ρ	ower Outlets				
	Designation	Name	Default Power-Up	Power Up Delay (sec)	Function Delay (sec)
	Oulpul 1	Power Ouliel 1 Name	Last Sta	0	10
	Output 2	Power Outlet 2 Name	Last Sta 🗸	0	10
	Output 3	Power Outlet 3 Name	Last Sta 💙	0	10
	Output 4	Power Outlet 4 Name	Last Sta 💙	U	10
	Output 5	Power Outlet 5 Name	Last Sta 🕶	0	10
	Output 6	Power Outlet 6 Name	Last Sta 🕶	0	10
	Oulpul 7	Power Outlet 7 Name	Lasl Sla 💙	0	10
	Oulpul 8	Power Outlet 8 Name	Last Sta 💙	0	10
D	inital Outputs				
			Function		
	Designation	Name	Delay (sec)		
	Output 1	Digital Output 1 Name	10		
	Output 2	Digital Output 2 Name	10		
	Output 5	Digital Output 3 Name	10		
	ouspor +	engitar output 4 manne	10		

ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each device and each input.

- M0 identifies the ePowerSwitch 8XM device,
- PW followed by "A", "B" or "X" identifies power supply input A, B and auxiliary power input,
- DI followed by 1 to 8 identifies the Digital Inputs of the I/O Extension Module (option),
- EM identifies the I/O Extension Module (option),
- O followed by 1 to 8 identifies the power outlets.

Name:

In these fields, enter the name you want to give to the selected device, its power outlets, digital inputs or outputs and power supplies. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Power Supplies:

In this field, enter the name you want to give to the two power inputs A and B and to the auxiliary power input. The name can be from 1 to 32 characters long and can contain alphanumeric characters.

Digital inputs:

In this field, enter the name you want to give to each Digital Input of the I/O Extension Module connected to the ePowerSwitch (option). The name can be from 1 to 32 characters long and can contain alphanumeric characters.

Power Outlets:

In this field, enter the name you want to give to each power outlet of the ePowerSwitch. The name can be from 1 to 32 characters long and can contain alphanumeric characters.

Default Power-Up:

In the drop-down lists, choose for each power outlet the default status to apply after power-up.

You can choose between:

- "On" if you want the corresponding power outlet to be always switched On after power-up.
- "Off" if you want the corresponding power outlet to be always switched Off after power-up.
- "Last Status" if you want that the corresponding power outlet takes again the state it was in before power failure.

Power up delay:

In this field, enter the power up delay you want to define for each power outlet. Power up delay means the delay before the power outlet will take the defined status after power up. The delay can be set between 1 and 65535 seconds, the value 0 means that no delay has to be applied after power up.

Function delay:

In this field, enter the delay you want to define before the execution of a function (for example Restart function of an outlet).

Digital outputs:

In this field, enter the name you want to give to each Digital Output of the I/O Extension Module connected to the ePowerSwitch (option). The name can be from 1 to 32 characters long and can contain alphanumeric characters.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.8.2. Settings / Peripherals - ePowerSwitch Satellite



Up to 16 ePowerSwitch 8-port or 1-port can be attached to the ePowerSwitch 8XM to remotely turn electrical devices on/off or reboot them.

You can connect an ePowerSwitch 1XS, 8XS or 8XS /32 to the RJ45 connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain Connection).

To connect an ePowerSwitch to the ePowerSwitch 8XM, use following procedure:

- 1. Set the dip switches of the ePowerSwitch so that the selected I/O address does not conflict with another ePowerSwitch already installed (see user's guide of the corresponding ePowerSwitch).
- Do NOT connect the xBus cable and the power cable before setting its DIP switches,
 - Do NOT use the same address for two different ePowerSwitch devices.
- 2. Using a standard RJ45 network cable, connect the ePowerSwitch to the xBus connector on the ePowerSwitch 8XM or behind another xBus peripheral already connected to the ePowerSwitch 8XM.
- 3. Connect the power cable(s) to your ePowerSwitch device.

To configure the ePowerSwitch, use following Log in procedure:

- 1. Open you browser and log in to the Administrator's Configuration Page, (ex. <u>http://192.168.100.200/sysadmin.htm</u>).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab.

Accounts		Groups Peri	nhera	ls Rules				
Perip	hera	9						?
Activated	шø	Type	•	Name	•	Edit	Info	Delete
V	MO	PowerSwitch		FPS 8XM demo		e	đ	
ব	S1	ePowerSwitch 1XS		ePowerSwitch 1XS 1 Name		e	i	
	S 2	ePowerSwitch 8XS/32		Satellite 2 Name		P	i	
R	53	Power Switch 8-Port		Power Switch 8-Port 3 Nam	e	A	1	
	11	I Sensor		I Sensor 1 Name		۲	1	
¥	182	TH Sensor		TH Sensor 2 Name		Ξ	1	1
V	TAC	TA Sensor		TA Sensor 3 Name		E	1	
	TP4	TP Sensor		TP Sensor 4 Name		ß	i	
V	DIM1	Digital Input Module		Digital Input Module 1 Nam	e	A	i	
A	PB2	Push-Button		Push-Button 2 Name		Π	1	
•	CP1	AC Current Probe		AC Current Probe 1 Name		Ð	1	
	FM2	Energy Meter		Energy Meter 2 Name		ē	1	1
10000	T 1							

If the ePowerSwitch is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of up to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.

The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another ePowerSwitch connected to the ePowerSwitch 8XM, a conflict occurs and the corresponding Edit and Info symbol of the previous connected ePowerSwitch will be changed to black. In that case, disconnect your last connected ePowerSwitch, remove its power cable, change the DIP switch settings to solve the address conflict and reconnect the ePowerSwitch again. If the conflict is solved, all connected ePowerSwitches will now appear on the Peripherals page and their Edit and Info Symbol will be red.
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).
- 4. To configure or modify the settings of the connected ePowerSwitch device, click on the corresponding "Edit" button in the Peripherals page. A new page appears, allowing you to set all the parameters of the ePowerSwitch Satellite device.

leol				ePo	werSv	vitch	8XM R2
enera	I Settings	Misc	Help				
Acco	unts	Groups	Peripherals	Rules			
- 2 P	ower Swi	tch 8-Port					2
ID	Designation	N	lame				
S3	Device	F	Power Switch 8-Port 3 Na	ime			
		P					
P	ower Supp	lies					
ID	Designation	N	lame				
PWA	Power Input	1	Power Input A Name				
PWB	Power Inpul	2	Power Input B Name				
	ower Outle	te					
	ower outle	13			Default	Denne Lin	Employ
ID	Designation	N	lame		Power-Up	Delay (sec)	Delay (sec)
01	Output 1	6	Power Outlet 1 Name		Last Sta	0	10
02	Output 2	6	Power Outlet 2 Name		Last Sta	0	10
03	Output 3	6	rower Outlet 3 Name		Last Stell	0	10
05	Output 5	6	Power Outlet 5 Name		Last Sta	0	10
06	Output 6		Power Outlet 6 Name		Last Sta	0	10
07	Output 7		ower Outlet 7 Name		Last Sta	0	10
08	Output 8		ower Outlet 8 Name		Last Sta	0	10
	COULT I	DISCARD		DIVCHANCES			11 15

Neol				ePc	werSv	vitch	8XM R
eneral	Settings	Misc	Help				
Accou	ints	Groups	Peripherals	Rules			
🔁 el	PowerSw	itch 1XS					2
ID	Designation	,	Name				
S1	Device	I	ePowerSwitch 1XS 1 Nan	ne			
P	ower Supp	olies					
U	Designation		Name		_		
PWA	Power Input	1	Power Input A Name				
P	ower Outle	ts					
	Designation		Name		Default Power-Up	Power Up Delay (sec)	Function Delay (sec)
ID					Louis Charles	0	10

Account	accordings in	ing Hole				000000
	ts Crou	ps Peripherals	Rules			
eP	owerSwitch 8	3X \$/32				2
>	Designation	Name				
2 1	Device	Satellite 2 Nam e				
An	aloginputs					
	Designation	Name		Unit	Graph	Period (minures)
	Analog Input 1	Current Input A Name		A		1
8	Analog Input 2	Current Input B Name		A		1
Po	wer Supplies					
	Designation	Name				
NΛ	Power Input 1	Power Input∧Name				
ΝВ	Power Input 2	Power Input B Name				
Po	werOutlets					
	Designation	Name		Default Power-Up	Power Up Delay (sec)	Function Delay (sec)
1	Output 1	Power Outlet 1 Name		Last Sti	U	10
2	Output 2	Power Outlet 2 Name		Last Str	D	10
3	Output 3	Power Outlet 3 Name		Last Str	0	10
4	Cutput 4	Power Outlet 4 Name		Last 5tz	0	10
n (Output 5	Power Outlet 5 Name		Last Sta	D	10
6	Output 6	Power Outlet 6 Name		Tast Sta	D.	10
/	Output /	Power Outlet / Name		Last Sta	0	10
к	Output 8	Power Outlet 8 Name		Last Sto	D	10
LOG	OUT 🛅 DIS	CARD CHANGES 🛛 💾 APP	LY CHANGES			a 9

ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each connected ePowerSwitch Satellite, its power input(s) and its power outlet(s).

- followed by a number between 1 and 16 identifies the ePowerSwitch Satellite unit, S ٠
- •
- I followed by "A" or "B" identifies the current input A and B of the ePowerSwitch 8XS /32, PW followed by "A" or "B" identifies power supply input A and B of each ePowerSwitch Satellite, ٠
- 0 followed by 1 to 8 identifies the power outlet output. •

Name:

In this field, enter the name you want to give to the selected ePowerSwitch. The name can be from 1 to 32 characters long and can contain alphanumeric characters.



Analog Inputs:

Only for Satellite 8XS /32

Name:

In this field, enter the name you want to give to the two current inputs A and B. The name can be from 1 to 32 characters long and can contain alphanumeric characters.

Unit: In this field enter the unit of measurement you want to be displayed.

Graph:

Check this box if you want a display of the analog inputs.

Period (minutes):

In this field enter the period between two measurements.

Power Supplies:

In this field, enter the name you want to give to the two power input A or B. The name can be from 1 to 32 characters long and can contain alphanumeric characters.

Power Outlets:

In this field, enter the name you want to give to each power outlet of the ePowerSwitch Satellite. The name can be from 1 to 32 characters long and can contain alphanumeric characters.

Default Power-Up:

In the drop-down lists, choose for each power outlet the default status to apply after power-up.

You can choose between:

- "On" if you want the corresponding power outlet to be always switched On after power-up.
- "Off" if you want the corresponding power outlet to be always switched Off after power-up.
- "Last Status" if you want that the corresponding power outlet takes again the state it was in before power failure.

Power up delay:

In this field, enter the power up delay you want to define for each power outlet. Power up delay means the delay before the power outlet will take the defined status after power up. The delay can be set between 1 and 65535 seconds, the value 0 means that no delay has to be applied after power up.

Function delay:

In this field, enter the delay you want to define before the execution of a function (for example Restart function of an outlet).

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.8.3. Settings / Peripherals - Analog inputs



Up to 32 temperature, temperature and humidity, temperature and ambient light sensors can be attached to the ePowerSwitch 8XM to monitor environmental conditions.

Only 16 temperature and IR proximity sensors can be attached to the ePowerSwitch 8XM to monitor temperature change and detect presence of a target. The IR proximity sensor acts as a digital input like the DIM module (see § 3.3.8.4.2).

You can connect a sensor to the RJ45 connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain Connection).

To connect a sensor to the ePowerSwitch 8XM, use following procedure:

- 1. Set the dip switches of the sensor so that the selected I/O address does not conflict with another sensor already installed (see user's guide of the corresponding sensor).
- Do NOT connect the xBus cable before setting its DIP switches
- Do NOT use the same address for two different sensors
- 2. Using a standard RJ45 network cable, connect the sensor to the RJ45 xBus connector on the ePowerSwitch 8XM or behind another xBus peripheral already connected to the ePowerSwitch 8XM.

To configure the sensor, use following Log in procedure:

- 1. Open you browser and log in to the Administrator's Configuration Page, (ex. <u>http://192.168.100.200/sysadmin.htm</u>).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab.

Accounts		Groups	Periphera	ls Rules				
_								
Perip	hera	8						2
Activated	1D \$	Lype	÷	Name		¢ I dit	Info	Delete
V	MO	PowerSwitch		FPS 8XM demo		6	1	
Ы	S 1	ePowerSwitch	1X5	ePowerSwitch 1X	S 1 Name		i	
M	S 2	ePowerSwitch	8XS/32	Satellite 2 Name		8	i	
P	53	Power Switch 8	3-Port	Power Switch 8-P	ort 3 Name	6	A	
V	11	I Sensor		I Sensor 1 Name			ĩ	
V	1112	III Sensor		III Sensor 2 Nam	e.	6	1	
	тал	TA Sensor		TA Sensor 3 Nam	e	ø	1	
M	TP4	TP Sensor		TP Sensor 4 Nam	e	B	i	
	DIM1	Digital Input M	lodule	Digital Input Mod	ule 1 Name		i	
R	PB2	Push-Button		Push-Button 2 Na	me		4	
V	CP1	AC Current Pro	ibc	AC Current Probe	1 Name	1	1	
Y	EM2	Energy Meter		Energy Meter 2 N	ame	6	1	
	- 1 -							

If the sensor is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of up to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.

Note

The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another sensor connected to the ePowerSwitch 8XM, a conflict occurs and the corresponding Edit and Info symbol of the previous connected sensor will be changed to black. In that case, disconnect your last connected sensor, change the DIP switch settings to solve the address conflict and reconnect the sensor again. If the conflict is solved, all connected sensors will now appear on the Peripherals page and their Edit and Info Symbol will be red.
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).
- 4. To configure or modify the settings of a sensor, click on the corresponding "Edit" button in the Peripherals page. A new page appears, allowing you to set all the parameters of the temperature (T), temperature and humidity (TH) or temperature and ambient light (TA) sensors.





	unts 6	Groups	Perioherals	Rules			
Т	A Sensor						2
							_
	Designation	ľ	lame				
8	Device		TA Sensor 3 Name				
A	nalog inputs						
	Designation	١	lame		Unit	Graph	Period (minutes)
	Analog Input 1	i i	Temperature Input Name		^C		1
	Analog Input 2		Amhient Light Input Nam	e	Lux		1

Sensor ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each connected sensor.

- T followed by a number between 1 and 32 identifies each temperature sensor,
- TH followed by a number between 1 and 32 identifies each humidity sensor,
- TA followed by a number between 1 and 32 identifies each ambient light sensor.

Sensor Name:

In this field, enter the name you want to give to the selected sensor. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Analog Inputs

Name:

In this field enter the name you want to give to the analog inputs.

Unit:

In this field enter the unit of measurement you want to be displayed (°C, %RH, Lux).

Graph:

Check this box if you want a display of the analog inputs.

Period (minutes):

In this field enter the period between two measurements.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.8.4. Settings / Peripherals - Digital Inputs

Up to 16 x Digital Input Modules, Push Buttons or Temperature and Proximity sensors can be attached to the ePowerSwitch 8XM to monitor environmental conditions.

You can connect them the RJ45 connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain Connection).

Note

An I/O Extension Module is also available to connect 8 dry contact inputs and 4 relay outputs to the ePowerSwitch 8XM (ref. I/O EXT MOD).

3.3.8.4.1. Digital Input Modules



Up to 16 Digital Input Modules with 16 inputs for dry contacts (door contacts, smoke and water detectors...) can be attached to the ePowerSwitch 8XM to monitor environmental conditions.

To connect a Digital Input Module to the ePowerSwitch 8XM, use following procedure:

- 1. Set the dip switches on the bottom of the case so that the selected I/O address does not conflict with another Digital Input Module already installed (see user's guide of the Digital Input Module).
- Note

Do NOT connect the xBus cable and the Power adapter(s) before setting its DIP switches
Do NOT use the same address for two different Digital Input Modules

- 2. Using a standard RJ45 network cable, connect the Digital Input Module to the RJ45 xBus connector on the ePowerSwitch 8XM or behind another xBus peripheral already connected to the ePowerSwitch 8XM.
- 3. Connect the power adapter(s) to your Digital Input Module.

To configure the Digital Input Module, use following Log in procedure:

- 1. Open you browser and log in to the Administrator's Configuration Page, (ex. <u>http://192.168.100.200/sysadmin.htm</u>).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab.

If the Digital Input Module is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of up to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.

The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another Digital Input Module connected to the ePowerSwitch 8XM, a conflict occurs and the corresponding Edit and Info symbol of the previous connected Digital Input Module will be changed to black. In that case, disconnect your last connected Digital Input Module, remove its power adapter(s), change the DIP switch settings to solve the address conflict and reconnect it again. If the conflict is solved, all connected devices will now appear on the Peripherals page and their Edit and Info Symbol will be red.
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

To configure or modify the settings of the Digital inputs, click on the corresponding "Edit" button in the Peripherals page.

A new page appears, allowing you to set all the parameters of the Digital Inputs.

	erowe	Holo	Misc	Sattinos	loe
	Rules	Peripherals	Groups	nts	Accou
		9	ıt Module	iqital Inpu	D
8					
		Name		Designation	n
	ne	Digiral Inpur Module I Na		Device	TMI
			lles	ower Suppl	P
		Name		Designation	n
		Power Toput A Name		Power Inpur I	WA
		Power Topur B Name	7	Power Input 7	WB
			5	iaitai input	D
		Name		Designation	D
		Digital Input 1 Name	1	Digital Input:	11
		Digital Input 2 Name	2	Digital Input:	12
		Digital Input 3 Name	3	Digital Input 3	13
		Digital Input 4 Name	4	Digital Input	14
		Digital Input 5 Name	5	Digital Input!	15
		Digiral Inpur 6 Name	6	Digital Input	16
		Digital Input / Name	/	Digital Input	17
		Digital Input 8 Name	8	Digital Input	18
		Digital Input 9 Name	9	Digital Inputs	19
		Digital Input 10 Nam e	10	Digital Input :	110
		Digital Input 11 Nam e	11	Digital Input:	I11
		Digital Input 12 Name	12	Digital Input:	I12
		Digital Input 13 Nam e	13	Digital Input:	I13
		Digital Input 14 Name	14	Digital Input:	114
		Digital Input 15 Name	15	Digital Input :	I15
		Digital Input 16 Nam e	16	Digital Input :	I16
(d 16	LY CHANGES	CHANGES 🔡 API	DISCAR	GOUT	3 LO

ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each connected Digital Input Module.

- DIM followed by a number between 1 and 16 identifies each Digital Input Module
- PW followed by "A" or "B" identifies power supply input A and B of each Digital Input Module
- DI followed by a number between 1 and 16 identifies each digital input of the module

Name:

In this field, enter the name you want to give to the Digital Input Module. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Power Supplies:

In this field, enter the name you want to give to the two power supplies "PWA" and "PWB". The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Digital Inputs

Name:

In this fields, enter the name you want to give to each Digital Input. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**
3.3.8.4.2. Temperature and proximity sensors



Up to 16 temperature and proximity sensors can be attached to the ePowerSwitch 8XM to monitor temperature change and detect presence of a target

The IR proximity sensor acts as a digital input like the Digital Input Module or the Push Button.

You can connect a sensor to the RJ45 connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain Connection).

To connect a sensor to the ePowerSwitch 8XM, use following procedure:

1. Set the dip switches of the sensor so that the selected I/O address does not conflict with another sensor already installed (see user's guide of the corresponding sensor).

Note

Do NOT connect the xBus cable before setting its DIP switches.Do NOT use the same address for two different sensors.

2. Using a standard RJ45 network cable, connect the sensor to the RJ45 xBus connector on the ePowerSwitch 8XM or behind another xBus peripheral already connected to the ePowerSwitch 8XM.

To configure the sensor, use following Log in procedure:

- 1. Open you browser and log in to the Administrator's Configuration Page, (ex. <u>http://192.168.100.200/sysadmin.htm</u>).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab.

If the sensor is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of up to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.

The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another sensor connected to the ePowerSwitch 8XM, a conflict occurs and the corresponding Edit and Info symbol of the previous connected sensor will be changed to black. In that case, disconnect your last connected sensor, change the DIP switch settings to solve the address conflict and reconnect the sensor again. If the conflict is solved, all connected sensors will now appear on the Peripherals page and their Edit and Info Symbol will be red.
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

To configure or modify the settings of a sensor, click on the corresponding "Edit" button in the Peripherals page. A new page appears, allowing you to set all the parameters of the temperature & proximity (TP) sensors.

Acco	unts Grou	ips Peripheral	s Rules			
2	Paensor					2
D	Designation	Name				
14	Device	11 ⁹ Sensor 4 Name	:			
A	inalog inputs					
3	Designation	Name		Unit	Graph	Period (minutos)
1	Analog Input 1	Le mperature Input	t Name	PC:		1
D	igital Inputs					
	Designation	Name		_		
51	Digital Input 1	Preximity Input Na	ime			

Sensor ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each connected sensor.

• TP followed by a number between 1 and 16 identifies each proximity sensor.

The ePowerSwitch 8XM supports a total of up to 16 temperature and proximity sensors.

Sensor Name:

In this field, enter the name you want to give to the selected sensor. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Analog Inputs

Name:

In this field enter the name you want to give to the analog inputs.

Unit:

In this field enter the unit of measurement you want to be displayed (°C).

Graph:

Check this box if you want a display of the analog inputs.

Period (minutes):

In this field enter the period between two measurements.

Digital Inputs

Name:

In this field enter the name you want to give to the digital input.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.8.4.3. Push Button



Up to 16 Push buttons can be attached to the ePowerSwitch 8XM to trigger manually pre-programmed actions.

You can connect a Push Button to the RJ45 connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain Connection).

To connect a Push button to the ePowerSwitch 8XM, use following procedure:

1. Set the dip switches of the Push button so that the selected I/O address does not conflict with another Push button or another Digital Input Module already installed (see user's guide of the Push button).



Do NOT connect the xBus cable before setting its DIP switches.
Do NOT use the same address for two different Push buttons.

2. Using a standard RJ45 network cable, connect the Push button to the RJ45 xBus connector on the ePowerSwitch 8XM or behind another xBus peripheral already connected to the ePowerSwitch 8XM.

To configure the Push button, use following Log in procedure:

- 1. Open you browser and log in to the Administrator's Configuration Page, (ex. <u>http://192.168.100.200/sysadmin.htm</u>).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab.

If the Push button is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of 1 to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.

The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another Push button or another Digital Input Module connected to the ePowerSwitch 8XM, a conflict occurs and the corresponding Edit and Info symbol of a previous connected Push button or Digital Input Module will be changed to black. In that case, disconnect your last connected Push button, change the DIP switch settings to solve the address conflict and reconnect the Push button again. If the conflict is solved, all connected devices will now appear on the Peripherals page and their Edit and Info Symbol will be red.
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

To configure or modify the settings of the Push Button, click on the corresponding "Edit" button in the Peripherals page. A new page appears, allowing you to set all the parameters of the connected Push Buttons.

meral	Settings	Misc	Help			
Acco	unt«	Groups	Periph	erals	Rules	
€ P	ush-Butt	on				2
D	Decignation		Name			
/B2	Device		Push-Bullon 2	Name		l i
D	igital Input	s				
D	Designation		Name			
PI	Digital Input	1	Short Puch 1	Name		l
P2	Digital Input	. 2	Long Push 2 M	lame		l i i i i i i i i i i i i i i i i i i i
310						Z N
LO	GOUT	DISCARI	CHANGES		PPLY CHANGES	(4) (b)

ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each Push button.

- PB followed by a number between 1 and 16 identifies each Push button
- SP1 identifies each "Short Push" action (during less than 1 second)
- LP2 identifies each "Long Push" action (during more than 3 seconds)

Name:

In this field, enter the name you want to give to the selected Push button. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Digital Inputs

Name:

In these fields enter the name of the two type of action (Short Push or Long Push).

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.8.5. Settings / Peripherals - AC Current Probe



Up to 16 AC Current probes can be attached to the ePowerSwitch 8XM to monitor the current consumption of an electrical device (PC, server, light, printer...) and trigger actions if predefined limits are exceeded.

You can connect an AC Current probe to each of the RJ45 connector on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain connection).

To connect an AC Current probe to the ePowerSwitch 8XM, use following procedure:

- 1. Set the dip switches of the AC Current probe so that the selected I/O address does not conflict with another AC Current probe already installed (see user's guide of the AC Current probe)
- Do NOT connect the xBus cable and the power cable before setting its DIP switches
 Do NOT use the same address for two different AC Current probes
- 2. Using a standard RJ45 network cable, connect the AC Current probe to the RJ45 xBus connector on the ePowerSwitch 8XM or behind another AC Current probe already connected to the ePowerSwitch 8XM.
- 3. Connect the power cable to your device

To configure the Current Probe, use following Log in procedure:

- 1. Open you browser and log in to the Administrator's Configuration Page, (ex. <u>http://192.168.100.200/sysadmin.htm</u>).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab

If the AC Current probe is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of 1 to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.

The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another AC Current probe connected to the ePowerSwitch 8XM, a conflict occurs and the corresponding Edit and Info symbol of the previous connected AC Current probe will be changed to black. In that case, disconnect your last connected AC Current probe, remove its power cable, change the DIP switch settings to solve the address conflict and reconnect the AC Current probe again. If the conflict is solved, all connected AC Current probes will now appear on the Peripherals page and their Edit and Info Symbol will be red.
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

4. To configure or modify the settings of an AC Current Probe, click on the corresponding "Edit" button in the Peripherals page. A new page appears, allowing you to set all the parameters of the connected AC Current Probe.

	i Settings	MISC	нер				
Acco	aunt«	Groups	Peripherals	Rüles			
)	AC Current	Probe					
	ie canon						2
5	Designation		Name				
PI	Device		AC Current Probe 1 Nam	e			
ļ	Analog Inputs	5					
)	Designation		Name		Unit	Graph	Period (minutes)
	Analog Input 1	L	Current Input 1 Name		A	П	1
-							

ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each Current Probe.

- CP followed by a number between 1 and 16 identifies each current probe
- I1 identifies the current analog input.

Name:

In this field, enter the name you want to give to the selected current probe. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Analog Inputs

Name:

In this field, enter the name you want to give to the analog input. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Unit:

In this field enter the unit of measurement you want to be displayed.

Graph:

Check this box if you want a display of the analog inputs.

Period (minutes):

In this field enter the period between two measurements.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.8.6. Settings / Peripherals - Energy Meter



Up to 16 EnergyMeters can be attached to the ePowerSwitch 8XM to monitor the energy consumption (kWh) and the current consumption (Amp RMS) of eight electrical devices (PC, server, light, printer...) and trigger actions if predefined limits are exceeded. The EnergyMeter is also able to monitor the Input voltage of both 16 Amps power inputs.

You can connect an EnergyMeter to the RJ45 connector located on the ePowerSwitch 8XM or behind an xBus peripheral already connected to the ePowerSwitch 8XM (Daisy Chain connection).

To connect an EnergyMeter to the ePowerSwitch 8XM, use following procedure:

1. Set the dip switches of the EnergyMeter so that the selected I/O address does not conflict with another EnergyMeter already installed (see user's guide of the EnergyMeter).



Do NOT connect the xBus cable and the Power cable(s) before setting its DIP switches.
Do NOT use the same address for two different AC Current probes.

- 2. Using a standard RJ45 Network cable, connect the EnergyMeter to the RJ45 xBus connector on the ePowerSwitch 8XM or behind another xBus peripheral already connected to the ePowerSwitch 8XM.
- 3. Connect the power cable(s) to your EnergyMeter.

To configure the EnergyMeter, use following Log in procedure:

- 1. Open you browser and log in to the Administrator's Configuration Page, (ex. <u>http://192.168.100.200/sysadmin.htm</u>).
- 2. Enter the administrator name and password (default for both = admin). The home page appears.
- 3. Click on the Settings and then on the Peripherals Tab.

If the EnergyMeter is properly connected to the ePowerSwitch 8XM it will be automatically recognized and displayed on this page after a delay of 1 to 60 seconds. In this case, the colour of the corresponding Edit and Info symbol is red.

The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

Problem / Troubleshooting

- If you choose any setting that is already in use by another EnergyMeter connected to the ePowerSwitch 8XM, a conflict occurs and the corresponding Edit and Info symbol of the previous connected EnergyMeter will be changed to black. In that case, disconnect your last connected EnergyMeter, remove its power cable(s), change the DIP switch settings to solve the address conflict and reconnect the EnergyMeter again. If the conflict is solved, all connected EnergyMeter will now appear on the Peripherals page and their Edit and Info Symbol will be red.
- The Peripheral page is not automatically refreshed, so you need to refresh it by clicking the peripheral TAB again (or push [F5] or press <CTRL-R> on your keyboard if you use Internet Explorer or Mozilla Firefox).

4. To configure or modify the settings of the EnergyMeter, click on the corresponding "Edit" button in the Peripherals page. A new page appears, allowing you to set all the parameters of the Analog Inputs.

This page is used to configure the connected EnergyMeter.

L			ePowerSv	vitch	8XM R2
eral	Settings Misc	Help			
1000	unts Croups	Peripherals	Rules		
E	Energy Meter				?
	Designation	Name			
12	Device	Energy Mater 2 Namle			
A	naloginputs				
	Designation	Name	Unit	Graph	Period (minutes)
L	An alog Input 1	Real Energy Input 1 Nam e	kWh		1
	An alog Input 2	Current Input 1 Name	٨		1
	Analog Input 3	Real Energy Input 2 Name	kWh		1
	Analog Input 4	Current Input 2 Name	Λ		1
	Analog Input 5	Real Energy Input 3 Name	kWh		1
	Analog Input 6	Current Input 3 Name	٨		1
	An alog Input 7	Real Energy Input 4 Name	kwh		1
	An alog Input 0	Current Input 4 Name	A		1
	An alog Input 9	Real Energy Input 5 Name	kWh		1
	An alog Input 10	Current In put 5 Name	A		1
	An alog Input 11	Real Energy Input G Name	kWh	п	1
	An alog Input 12	Current In put G Name	A	п	1
	An alog Input 13	Real Energy Input 7 Name	kwh	п	1
	Analog Input 14	Current Input 7 Name	A	п	1
	Analog Input 15	Real Energy Input 8 Name	kWh	п	1
	Analog Input 16	Current Input 8 Name	A	п	1
VA17	7 Analog Input 17	Power A Input Name	V		1
/B18	8 Analog Input 18	Power B Input Name	V		1
			CHANGER		21 14
LC		IND CHANGES BAPPET	CHANGES		8 12

ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each Energy Meter. All the ID Codes used to identify an Energy Meter start with the characters "EM" followed by a number.

Name:

In this field, enter the name you want to give to the selected Energy Meter. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Analog Inputs

Name:

In this field enter the name you want to give to the analog input.

Unit:

In this field enter the unit of measurement you want to be display (A, kWh, V...).

Graph:

Check this box if you want a display of the analog inputs.

Period (minutes):

In this field enter the period between two measurements.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.9. Settings / Rules

Rules are used to control actions according to a specific event. For example, you can define a rule to switch a power outlet OFF and send an alert message using different methods like email, SNMP or Syslog when a temperature, humidity, ambient light or current exceeds a predefined value or when a contact is open.

eneral	Settings	Misc	llelp				
Accour	nts:	Groups	Peripherals	Rules			
<mark>→</mark> Ru	iles				Add a New Rule		?
Activat	t e dT he	tule Name			٠	Fdit	Delete
	OUT 🗾	DISCARD		PLY CHANGES	3		

- To remove an existing rule, click on "Delete" of the corresponding rule.

- To modify a rule, click on "Edit" of the corresponding rule.

This page is used to create, modify and delete rules.

- To add a new rule, click on "Add a New Rule" on the right side of the page.
- A new page appears, allowing you to set all the parameters of the rule.

leol					ePo	wer	Swit	ch 8	XM R2
eneral Settings	Misc	Help							
Accounts	Groups	Perip	herals	Ru	iles				
Add a New	/ Monitor	ing Rule							7
tule ID		R1							
tule Name									
tule Color									
tule Type		Schedule Ru	le						
			Hour	Minute					
		Start Time	19 💌	29 💌	[
Schedule Action		Repeat Time	00 💌	01 💌	[
	l∾I	Slop Time	19 💌	53 💌					
		Applicable Weekday	🔽 Sun	Mon Non	🔽 Tue	Ved Wed	🔽 Thu	🔽 Fri	🔽 Sat
		Set Power Outlet	S1: ePow O1: Pow	verGwitch ar Outlet 1	1XG 1 Nan Name	ne 💌	to On		
	P	Hend Hyslog Message	Local use	0	Emerge	ncy	•		
		Mail to							
ype of Action		Mail to	£						
		Syslog / Trap / Mail Message (max 255 characters)					•		
							·		
	DISCARE	CHANGES	🗎 A	PPLY CH	ANGES				

A total of 255 rules can be created and there are 6 different types of rules:

1. Schedule Rule:

This rule can be used to trigger user-specified actions according to a defined time table.

2. Ping Monitoring Rule:

This rule is used to control actions according to the response to a Ping command.

3. Scan Monitoring Rule:

This rule is used to control actions according to the response to a Scan command.

4. Power Supply Monitoring Rule:

This rule is used to control actions according to the state of the power supplies of the ePowerSwitch 8XM and its peripherals like the ePowerSwitch 8XS and the Digital Input Module.

5. Digital Input Monitoring Rule:

This rule is used to control actions according to the state of a dry contact from the I/O Extension Module connected to the ePowerSwitch 8XM, to a Digital Input Module, Proximity Sensor or a Push Button connected over the xBus to the ePowerSwitch 8XM.

6. Analog Input Monitoring Rule:

This rule is used to control actions when an analog input (temperature, humidity, ambient light, current...) exceeds a predefined value.

3.3.9.1. Settings / Rules - Schedule Rule

This rule can be used to trigger user-specified actions according to a defined time table. The schedule rule is weekday based and the administrator can declare, for each weekday, a start time, an end time and after what time the rule should be repeated.

The schedule rule can also be used to send status information or sensor values on specified weekdays at regular interval.

Neol					ePo	wer	Swit	ch 8	XM R2
eneral Settings	Misc	Help							
Accounts	Groups	Perip	horals	Ru	les				
🔁 Add a New	Monitori	ng Rule							2
Rule ID		R1							
Rule Name	1								
Rule Culur	1								
Rule Type	I	Schedule Ru	le		•				
			Hour	Minute					
	:	Start Time	19 💌	29 💌					
Schedule Action		Repeat Time	00 💌	01					
	2	Stap Time	19 💌	53 💌					
		Applicable Weiekday	🗹 Sun	Mon	🔽 lue	Ved Wed	🗹 thu	🔽 L ri	🔽 Sat
		Set: Power Dutlet	S1: ePov	verSwitch .	IXS 1 Nam	1e 💌	1.14		
		Send Syslog	Local us		Emerger		- -		
		Meissage Mail to	TRAFILISE		rmarga	n.y .			
Type of Action		Maul to							
		Syslog / Trap / Mail Meissage (max 255 theiracters)					-		
							•		
🔀 LOGOUT 🔰 🛽	DISCARD	CHANGES	A 🗄	PPLY CH	ANGES				

Rule ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each rule. All the ID Codes used to identify rules start with the letter "R" followed by a number from 1 to 255. If you delete a rule in the middle of the Rule list, the number of this rule will only be used again if no other rule is available.

Rule Name:

In this field, enter the name you want to give to the rule. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Rule Color:

In this field, select one of the 48 standard colours you want to use to highlight the rule when executed. To use own colours, just type in the Hex value of the colour you want. The Rule highlighting allows to quickly identify the triggered rule when displayed in the Rule Panel page or in a special users page.

Rule Type:

In this drop-down list, choose Schedule Rule then configure the event and the actions to perform.

Configuring the Event

Schedule Action:

Here you can define the time when the rule has to be executed. In the Drop-Down lists choose the time and below, check one or more day boxes.

Start Time

Defines what time the rule starts.

Repeat Time

Defines the time period in which the rule repeats.

Repeat Time cannot be set to zero.

Stop Time

Defines what time the rule ends.

- End Time must be greater than or equal to Start Time.
- If the rule has to be executed only once at the selected weekday, enter the same value for Start Time and End Time.
- If the rule has to be executed 24 hours at the selected weekday, Start Time must be 1 minute later than EndTime.

Applicable weekday

Defines which day(s) the rule has to be executed.

Type of Action

For the Event defined above, you can choose and configure following actions:

Set Group:

This type of action appears and can be configured only if you have already created at least one group (Settings/Groups Tab).

Check this box and in the corresponding drop-down list choose the power outlet group the rule will apply to. In the next corresponding drop-down list, choose the action to execute.

Each power outlet group can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch power outlets settings.

Set Power Outlet:

Check this box and in the corresponding drop-down list, choose the power outlet the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each power outlet can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch power outlets settings.

Set Digital Output:

Check this box and in the first corresponding drop-down list, choose the device from which one you want to switch a digital output. In the second drop-down list, choose the digital output the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each digital output can be open, close, pulse open or pulse close. If you choose "pulse...", you will also be able to define a pulse delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch digital output settings.

- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch digital output settings.

Send Syslog Message:

This type of action appears and can be configured only if you have already created at least one destination Syslog Server (Misc/Log Settings Tab).

Check this box if you want to send a message to a Syslog server. In the following drop-down lists choose the facility and the severity of the message to send. The address of the Syslog server has to be defined in the "Log Settings Page".

Send Trap Message:

This type of action appears and can be configured only if you have already specified at least a destination SNMP Server (General/SNMP Tab).

Check this/these box(es) and specify one or two SNMP addresses in the corresponding field if you want to send SNMP messages to one or two SNMP Servers.
Mail to:

This type of action appears and can be configured only if you have already created a destination SMTP Server (General/SMTP Tab).

Check this/these box(es) and specify one or two e-mail address(es) in the corresponding field if you want to send an e-mail to one or two specific user(s). To send e-mails, you will need a SMTP server on the network and you will have to configure its parameters in the "SMTP Page".



Syslog / Trap / Mail Message:



This field appears only if you have already specified at least one destination Syslog Server (Misc/Log Settings Page), one destination SNMP Server (General/SNMP Page) or a destination SMTP Server (General/SMTP Page).

Up to 255 characters may be entered in this free text field. The text will appear in the Syslog, the Trap and the e-mails.

The message can be completed with the status of an input (a power supply or door contact for example) or the value of a sensor (a temperature sensor for example). For this, simply enter, between two percent characters, the ID of the corresponding input device (for details see § 5.1 Sending status and values using rules).

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.9.2. Settings / Rules - Ping Monitoring Rule

This rule can be used to check if a computer or any IP device is connected to the network. It sends ping packets and listens for replies from the specific host. If the host doesn't reply, the ePowerSwitch 8XM can automatically switch the powered device off and after a specified delay, switch it again on (for details see Ping & Scan Method).

Neol				ePo	werS	witch	8XM R2
eneral Settings	Misc	Hclp					
Accounts	Groups	Perip	herals	Rules			
🔁 Add a New	Monitori	ing Rule					2
							-
Rule ID		R1					
Rule Name							
Rule Color							
Rule Type		Ping Monitor	nng Rule				
IP Device to monitor		0.0.0.0					
Wait Time for Answer		0 se	e.				
Interval between Req	uests	0 50	c				
Number of unsuccess	ful Requests	0					
Delay before First Rec	quest after	0 se	c				
		Set Power Outlet	MD: EPS 80	(M. /omo			
			Mo. coc o	Outer I Marrie			
		Set Digital Output	DO1: Diuit	al Output 1 Name		Open	
		Mail to					
Type of Action		Mail to					
		Syslog / Trop / Moil Message (max 255 characters)			-		
					7	·	
	DISCARD	CHANGES		PLY CHANGES			

Rule ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each rule. All the ID Codes used to identify rules start with the letter "R" followed by a number from 1 to 255. If you delete a rule in the middle of the Rule list, the number of this rule will only be used again if no other rule is available.

Rule Name:

In this field, enter the name you want to give to the rule. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Rule Color:

In this field, select one of the 48 standard colours you want to use to highlight the rule when executed. To use own colours, just type in the Hex value of the colour you want. The Rule highlighting allows to quickly identify the triggered rule when displayed in the Rule Panel page or in a special users page. **Rule Type:**

kule Type:

In this drop-down list, choose Ping Monitoring Rule then configure the event and the actions to perform.

Configuring the Event

IP device to monitor:

In this field enter the IP address of the IP device that you want to monitor using the Ping command. **Wait Time for Answer:**

In this field, define the delay in seconds for the Answer Timeout.

The delay can be set between 1 and 10 seconds.

Interval between Requests:

In this field, define the delay in seconds between ping commands sent to the IP device to monitor. The delay can set between 30 and 65535 seconds.

Number of unsuccessful Requests before Action:

In this field, define the number of Ping commands to be sent to the IP device before executing the actions. The number can be set between 1 and 65535 seconds.

Delay before First Request after Power up:

In this field, define the time in seconds before restarting the monitoring after the reboot action. The delay can be set between 30 and 65535 seconds.

Configuring the Actions:

For the Event defined above, you can choose and configure following actions:

Set Group:

This type of action appears and can be configured only if you have already created at least one group (Settings/Groups Tab).

Check this box and in the corresponding drop-down list choose the power outlet group the rule will apply to. In the next corresponding drop-down list, choose the action to execute.

Each power outlet group can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second for the delay, the delay will be the delay defined in the power outlets settings.

- If you choose a delay different from 0, it will replace the delay defined in the power outlets settings.

Set Power Outlet:

Check this box and in the corresponding drop-down list, choose the power outlet the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each power outlet can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch
- power outlets settings.

Set Digital Output:

Check this box and in the first corresponding drop-down list, choose the device from which one you want to switch a digital output. In the second drop-down list, choose the digital output the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each digital output can be open, close, pulse open or pulse close. If you choose "pulse...", you will also be able to define a pulse delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the digital output settings.

- If you choose a delay different from 0, the delay will replace the delay defined in the digital output
- settings.

Send Syslog Message:

This type of action appears and can be configured only if you have already created at least one destination Syslog Server (Misc/Log Settings Tab).

Check this box if you want to send a message to a Syslog server. In the following drop-down lists choose the facility and the severity of the message to send. The address of the Syslog server has to be defined in the "Log Settings Page".

Send Trap Message

This type of action appears and can be configured only if you have already specified at least a destination SNMP Server (General/SNMP Tab).

Check this/these box(es) and specify one or two SNMP addresses in the corresponding field if you want to send SNMP messages to one or two SNMP Servers.

Mail to:

This type of action appears and can be configured only if you have already created a destination SMTP Server (General/SMTP Tab).

Check this/these box(es) and specify one or two e-mail address(es) in the corresponding field if you want to send an e-mail to one or two specific user(s). To send e-mails, you will need a SMTP server on the network and you will have to configure its parameters in the "SMTP Page".

Syslog / Trap / Mail Message



This field appears only if you have already configured at least one destination Syslog Server (Misc/Log Settings Page) or a destination SMTP Server (General/SMTP Page).

Up to 255 characters may be entered in this free text field. The text will appear in the Syslog, the Trap and the e-mails.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.9.3. Settings / Rules - Scan Monitoring Rule

This rule can be used to check if a specific protocol is available on a server (for example HTTP, FTP, Telnet, SMTP, POP...). If the connection is possible, ePowerSwitch 8XM knows that a server program is running there. If the connection is not possible, ePowerSwitch 8XM can automatically switch the powered device off and, after a specified delay, switch it again on (for details see Ping & Scan Method).

Neol				ePo	ower	Swit	ch 8X	M R2
eneral Settings	Misc	Help						
Accounts	Groups	Periphe	rals	Rules				
🔁 Add a New	Monitori	ng Rule						2
Rule ID		R1						
Rule Name								
Rule Color								
Rule Type		Scan Monitorin	g Rule		-			
IP Device to monitor		0.0.0		Port to scan	0			
Wait Lime for Answer		U acc						
Interval between Requ	ucata	0 300						
Number of unsuccessh	ul Requests	0						
Delay before First Req execution of the Rule	uest atter	0 sec						
	П	Sct Power Outlet	MO: EPS OXN D1: Power C	l demo Jullet I Name	T T	to On		
	П	Set Digital Output	MO: EPS DXN DO1: Digital	1 demo Output 1 Name	• •	to Open	V	
Lync of Action		Mail to						
		Mail to						
		Syslog / Trap / Mail Message (max 255 charactors)				*		
		_						

Rule ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each rule. All the ID Codes used to identify rules start with the letter "R" followed by a number from 1 to 255. If you delete a rule in the middle of the Rule list, the number of this rule will only be used again if no other rule is available.

Rule Name:

In this field, enter the name you want to give to the rule. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Rule Color:

In this field, select one of the 48 standard colours you want to use to highlight the rule when executed. To use own colours, just type in the Hex value of the colour you want. The Rule highlighting allows to quickly identify the triggered rule when displayed in the Rule Panel page or in a special users page.

Rule Type:

In this drop-down list, choose Scan Monitoring Rule then configure the event and the actions to perform.

Configuring the Event

IP device to monitor:

In this field, enter the IP address of the IP device that you want to monitor using the Scan command. In the "Port to scan" field, enter the port number you want to monitor.

The value can be set between 1 and 65535.

Wait Time for Answer:

In this field, define the delay in seconds for the Answer Timeout. The delay can be set between 1 and 10 seconds.

Interval between Requests:

In this field, define the delay between the scan commands sent to the IP device. The delay can be set between 30 and 65535 seconds.

Number of unsuccessful Scan Commands before Action:

In this field, define the number of Port scanning commands to be sent to the IP device before executing the actions.

The number can be set between 1 and 65535 seconds.

Delay before First Request after Power Up:

In this field, define the time in seconds before restarting the monitoring after the reboot action. The delay can be set between 30 and 65535 seconds.

Configuring the Actions

For the Event defined above, you can choose and configure following actions:

Set Group

This type of action appears and can be configured only if you have already created at least one group (Settings/Groups Tab).

Check this box and in the corresponding drop-down list choose the power outlet group the rule will apply to. In the next corresponding drop-down list, choose the action to execute.

Each power outlet group can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the power outlets settings.

- If you choose a delay different from 0, the delay will replace the delay defined in the power outlets settings.

Set Power Outlet:

Check this box and in the corresponding drop-down list, choose the power outlet the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each power outlet can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.

- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch power outlets settings.

Set Digital Output:

Check this box and in the first corresponding drop-down list, choose the device from which one you want to switch a digital output. In the second drop-down list, choose the digital output the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each digital output can be open, close, pulse open or pulse close. If you choose "pulse...", you will also be able to define a pulse delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the digital output settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the digital output settings.

Send Syslog Message:

This type of action appears and can be configured only if you have already created at least one destination Syslog Server (Misc/Log Settings Tab).

Check this box if you want to send a message to a Syslog server. In the following drop-down lists choose the facility and the severity of the message to send. The address of the Syslog server has to be defined in the "Log Settings Page".

Send Trap Message:

This type of action appears and can be configured only if you have already specified at least a destination SNMP Server (General/SNMP Tab).

Check this/these box(es) and specify one or two SNMP addresses in the corresponding field if you want to send SNMP messages to one or two SNMP Servers.

Mail to:

This type of action appears and can be configured only if you have already created a destination SMTP Server (General/SMTP Tab).

Check this/these box(es) and specify one or two e-mail address(es) in the corresponding field if you want to send an e-mail to one or two specific user(s). To send e-mails, you will need a SMTP server on the network and you will have to configure its parameters in the "SMTP Page".

Syslog / Trap / Mail Message:



This field appears only if you have already specified at least one destination Syslog Server (Misc/Log Settings Page), one destination SNMP Server (General/SNMP Page) or a destination SMTP Server (General/SMTP Page).

Up to 255 characters may be entered in this free text field. The text will appear in the Syslog, the Trap and the e-mails.

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.9.4. Settings / Rules - Power Supply Monitoring Rule

This rule can be used to monitor the status of the 2 power supplies of the ePowerSwitch 8XM and the power supplies of connected peripherals like ePowerSwitch 8XS and Digital Input Modules.

Neol				ePo	werS	witch	8XM R
eneral Settings	Misc	Help					
Accounts	Groups	Perip	herals	Rules			
🗲 Add a New	/ Monitor	ing Rule					2
Rule ID		RI					
Rule Name							
Rule Culur							
Rule Type		Power Supp	ly Monitoring	Rule 💽]		
Power Input to monit	or	M0: EPS 0XI PWA: Power	M demo r Input A Nar	ne 🔽	1		
Action if Power Supp	ly	Fault		•]		
		Sct Power Outlet	MD: EPS 8: O1: Power	KM demo Outlet 1 Name	T to	On 💌	
		Set Digital Oulpul	M0: EPS 8: DO1: Digit	KM ćemo al Output 1 Namo	T to	Open 💌	
Type of Action		Mail to					
		Mail to					
		Syslog / Trap / Mail Message (max 255 characters)				L.	
						r	
		CHANGES		PLY CHANGES			

Rule ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each rule. All the ID Codes used to identify rules start with the letter "R" followed by a number from 1 to 255. If you delete a rule in the middle of the Rule list, the number of this rule will only be used again if no other rule is available.

Rule Name:

In this field, enter the name you want to give to the rule. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Rule Color:

In this field, select one of the 48 standard colours you want to use to highlight the rule when executed. To use own colours, just type in the Hex value of the colour you want. The Rule highlighting allows to quickly identify the triggered rule when displayed in the Rule Panel page or in a special users page.

Rule Type:

In this drop-down list, choose Power Supply Monitoring Rule then configure the event and the actions to perform.

Configuring the Event

Power Input to monitor:

In the first Drop-Down list choose the device for which you want to monitor the power supplies. Each device name is preceded by the ID Code of the device.

- M0 for the ePowerSwitch 8XM,
- S1 to S16 for the ePowerSwitch Satellite units,
- DIM1 to DIM16 for Digital Input Modules.

A character between brackets can follow this ID Code:

- The "X" character means that the corresponding peripheral is physically not connected.
- The "!" character means that the corresponding peripheral is physically connected but not activated. If you want to activate it, go to the "Settings/Power Outlets" tab.

- The " " character (blank) means that the corresponding satellite is physically connected and activated.

In the second Drop-Down list, choose the power input (Input A or Input B) you wish to monitor.

Action if power supply...:

In this Drop-Down list, choose if the action has to be executed on power on or power failure.

Configuring the Actions

For the Event defined above, you can choose and configure following actions:

Set Group:

This type of action appears and can be configured only if you have already created at least one group (Settings/Groups Tab).

Check this box and in the corresponding drop-down list choose the power outlet group the rule will apply to. In the next corresponding drop-down list, choose the action to execute.

Each power outlet group can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.

- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch

power outlets settings.

Set Power Outlet:

Check this box and in the corresponding drop-down list, choose the power outlet the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each power outlet can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch

power outlets settings.

Set Digital Output:

Check this box and in the first corresponding drop-down list, choose the device from which one you want to switch a digital output. In the second drop-down list, choose the digital output the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each digital output can be open, close, pulse open or pulse close. If you choose "pulse...", you will also be able to define a pulse delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the digital output settings.

- If you choose a delay different from 0, the delay will replace the delay defined in the digital output settings.

Send Syslog Message:

This type of action appears and can be configured only if you have already created at least one destination Syslog Server (Misc/Log Settings Tab).

Check this box if you want to send a message to a Syslog server. In the following drop-down lists choose the facility and the severity of the message to send. The address of the Syslog server has to be defined in the "Log Settings Page".

Send Trap Message:

This type of action appears and can be configured only if you have already specified at least a destination SNMP Server (General/SNMP Tab).

Check this/these box(es) and specify one or two SNMP addresses in the corresponding field if you want to send SNMP messages to one or two SNMP Servers.

Mail to:

This type of action appears and can be configured only if you have already created a destination SMTP Server (General/SMTP Tab).

Check this/these box(es) and specify one or two e-mail address(es) in the corresponding field if you want to send an e-mail to one or two specific user(s). To send e-mails, you will need a SMTP server on the network and you will have to configure its parameters in the "SMTP Page".

Syslog / Trap / Mail Message:



This field appears only if you have already specified at least one destination Syslog Server (Misc/Log Settings Page), one destination SNMP Server (General/SNMP Page) or a destination SMTP Server (General/SMTP Page).

Up to 255 characters may be entered in this free text field. The text will appear in the Syslog, the Trap and the e-mails.

The message can be completed with the status of an input (a power supply or door contact for example) or the value of a sensor (a temperature sensor for example). For this, simply enter, between two percent characters, the ID of the corresponding input device (for details see § 5.1 Sending status and values using rules).

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.9.5. Settings / Rules - Digital Input Monitoring Rule

This rule can be used to monitor the status of an electrical contact (a door contact, a smoke contact, a proximity sensor, a push button) and to initiate different actions if the contact status has changed.

Neol				ePo	ower	Swite	h 8XI	R2
eneral Setting	Misc	llelp						
Accounts	Groups	Periph	erals	Rules				
🔁 Add a Nev	v Monitor	ing Rule						?
Rule ID		R1						
Rule Name								
Rule Color								
Rule Type		Digital Input N	Monitoring Re	ile 📘	•			
Digital Input to mon	itor	MO: FPS OXM DI1; Digital I	demo ipul 1 Name	5	-			
Action if Digital Inpu	t ewitch to	Open		2	-			
		Set Power Outlet	MO: EPS 8X	4 demo Suflet 1 Name	v	to On	v	
		Set Digital Output	MO: EPS 8XI DO1: Digita	4 demo Output 1 Nam	• •	to Upon	V.	
Type of Action		Mail to						
		Mail to						
		Syslog / Trap / Mail Message (max 255 charactere)				*		
						Ŧ		
	DISCARD	CHANGES		LY CHANGES	3			

Rule ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each rule. All the ID Codes used to identify rules start with the letter "R" followed by a number from 1 to 255. If you delete a rule in the middle of the Rule list, the number of this rule will only be used again if no other rule is available.

Rule Name:

In this field, enter the name you want to give to the rule. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Rule Color:

In this field, select one of the 48 standard colours you want to use to highlight the rule when executed. To use own colours, just type in the Hex value of the colour you want. The Rule highlighting allows to quickly identify the triggered rule when displayed in the Rule Panel page or in a special users page.

Rule Type:

In this drop-down list, choose Digital Input Monitoring Rule then configure the event and the actions to perform.

Configuring the Event

Digital Input to monitor:

In the first drop-down list, choose the device you want to monitor:

- M0 for ePowerSwitch 8XM,
- TP followed by a number for a Proximity Sensor,
- DIM followed by a number for a Digital Input Module,
- PB follower by a number for a Push Button.

In the second drop-down list, choose the Input you want to monitor. The ePowerSwitch 8XM uses ID Codes to clearly identify each Input:

- DI1 to DI4 for the digital inputs of the ePowerSwitch 8XM,
- PS followed by a number for the IR proximity sensor inputs,
- DI followed by a number for the digital inputs of a DIM module,
- SP followed by a number for a short push on the push buttons,
- LP followed by a number for a long push on the push buttons.

Action if contact...:

In this Drop-Down list choose if the action has to be executed when:

- a contact opens or closes,
- when a push button is used (On or Off),
- when a IR proximity sensor detects a presence (On or Off).

Configuring the Actions

For the Event defined above, you can choose and configure following actions:

Set Group:

This type of action appears and can be configured only if you have already created at least one group (Settings/Groups Tab).

Check this box and in the corresponding drop-down list choose the power outlet group the rule will apply to. In the next corresponding drop-down list, choose the action to execute.

Each power outlet group can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch
- power outlets settings.

Set Power Outlet:

Check this box and in the corresponding drop-down list, choose the power outlet the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each power outlet can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch power outlets settings.

Set Digital Output:

Check this box and in the first corresponding drop-down list, choose the device from which one you want to switch a digital output. In the second drop-down list, choose the digital output the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each digital output can be open, close, pulse open or pulse close. If you choose "pulse...", you will also be able to define a pulse delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the digital output settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the digital output settings.

Send Syslog Message:

This type of action appears and can be configured only if you have already created at least one destination Syslog Server (Misc/Log Settings Tab).

Check this box if you want to send a message to a Syslog server. In the following drop-down lists choose the facility and the severity of the message to send. The address of the Syslog server has to be defined in the "Log Settings Page".

Send Trap Message:

This type of action appears and can be configured only if you have already specified at least a destination SNMP Server (General/SNMP Tab).

Check this/these box(es) and specify one or two SNMP addresses in the corresponding field if you want to send SNMP messages to one or two SNMP Servers.

Mail to:

This type of action appears and can be configured only if you have already created a destination SMTP Server (General/SMTP Tab).

Check this/these box(es) and specify one or two e-mail address(es) in the corresponding field if you want to send an e-mail to one or two specific user(s). To send e-mails, you will need a SMTP server on the network and you will have to configure its parameters in the "SMTP Page".

Syslog / Trap / Mail Message:



This field appears only if you have already specified at least one destination Syslog Server (Misc/Log Settings Page), one destination SNMP Server (General/SNMP Page) or a destination SMTP Server (General/SMTP Page).

Up to 255 characters may be entered in this free text field. The text will appear in the Syslog, the Trap and the e-mails.

The message can be completed with the status of an input (a power supply or door contact for example) or the value of a sensor (a temperature sensor for example). For this, simply enter, between two percent characters, the ID of the corresponding input device (for details see § 5.1 Sending status and values using rules).

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.9.6. Settings / Rules - Analog Input Monitoring Rule

This rule can be used to monitor an Analog Input value (temperature, humidity, ambient light, current....) and perform actions when the predefined value is exceeded.

leol				eP	owe	Switc	h 8XN	R2
meral Settings	Misc	lieip						
Accounts	Groups	Periphe	erals	Rules				
🗿 Add a New M	Aonito	ring Rule						2
tule ID		R1						
tule Name								
lule Color								
kule Type		Analog Input N	Ionitoring Rul	e	•			
nalog input to monitor		S2: [x] Satelli	le 2 Name		•			_
		IA: [x] Curren	t Input A Nan	10	-			
Action if	œ	Lower than	U	A				
	0	Higher than	0	A				
		Sel Power	MO: EPS 8XM	ćemo				
		Outlet	01: Power Oi	tlet 1 Name		to On	×.	
		Sel Digilal Output	MU: EPS 8XM DO1: Digital (éemo Julpul 1 Nai	ne 💽	to Open	v	
vnc of Action	П	Mail to						
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Mail to						
		Syslog / Trap / Mail Message (max 255 characters)				*		
3 LOGOUT	DISCAR	D CHANGES		CHANGE	s			
-								

Rule ID:

The ePowerSwitch 8XM automatically creates an ID Code to clearly identify each rule. All the ID Codes used to identify rules start with the letter "R" followed by a number from 1 to 255. If you delete a rule in the middle of the Rule list, the number of this rule will only be used again if no other rule is available.

Rule Name:

In this field, enter the name you want to give to the rule. The name can be from 1 to 32 characters long, and can contain alphanumeric characters.

Rule Color:

In this field, select one of the 48 standard colours you want to use to highlight the rule when executed. To use own colours, just type in the Hex value of the colour you want. The Rule highlighting allows to quickly identify the triggered rule when displayed in the Rule Panel page or in a special users page.

Rule Type:

In this drop-down list, choose Analog Input Monitoring Rule then configure the event and the actions to perform.

Configuring the Event

Analog Input to monitor:

Choose in the first Drop-Down list the device you want to monitor.

The ePowerSwitch 8XM supports:

- up to 32 temperature, humidity and ambient light sensors,
- up to 16 current probes,
- up to 16 EnergyMeter,
- up to 16 ePowerSwitch 8XS /32.

Each device name, which can be defined by the administrator (go to Settings/Sensors Tab), is preceded by the ID Code of the device. For example, all ID Codes used to identify temperature sensors start with the character "T" followed by a number.

A character between brackets can follow this ID Code:

- The "X" character means that the corresponding sensor is physically not connected.
- The "!" character means that the corresponding sensor is physically connected but not activated. If you want to activate it, go to the "Settings/Power Outlets" tab.
- The " " character (blank) means that the corresponding sensor is physically connected and activated.

According to the device you use, choose the Analog Input in the second Drop-Down (temperature, humidity, light, current, energy...).

Action Condition:

The options "higher than" and "lower than" enable you to define when the rule has to be executed. - Choose "higher than" if you want to execute the rule when the environment value exceeds the value you defined in the field on the right of "higher than".

- Choose "lower than" if you want to execute the rule when the environment value is below the value you defined in the field on the right of "lower than".

- For temperature, you can define values between -25°C and 60°C, +/- 2°C.
- For relative humidity, you can define values between 20 RH and 80 RH, +/- 3%.
 Relative Humidity absolute accuracy



- For ambient light, you can define values between 0 and 1000 Lux.
- For the effective current (rms), you can define values between 1 and 10 Amps.

Configuring the Actions

For the Event defined above, you can choose and configure the following actions:

Set Group:

This type of action appears and can be configured only if you have already created at least one group (Settings/Groups Tab).

Check this box and in the corresponding drop-down list choose the power outlet group the rule will apply to. In the next corresponding drop-down list, choose the action to execute.

Each power outlet group can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.

- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch

power outlets settings.

Set Power Outlet:

Check this box and in the corresponding drop-down list choose the power outlet the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each power outlet can be switched On/Off and restarted. If you choose "restart" you will also be able to define a restart delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the ePowerSwitch power outlets settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the ePowerSwitch
- power outlets settings.

Set Digital Output:

Check this box and in the first corresponding drop-down list, choose the device from which one you want to switch a digital output. In the second drop-down list, choose the digital output the rule will apply to. In the next corresponding drop-down list, choose the action to execute. Each digital output can be open, close, pulse open or pulse close. If you choose "pulse...", you will also be able to define a pulse delay between 0 and 65535 seconds.

- If you choose 0 second, the delay will be the delay defined in the digital output settings.
- If you choose a delay different from 0, the delay will replace the delay defined in the digital output settings.

Send Syslog Messages:

This type of action appears and can be configured only if you have already created at least one destination Syslog Server (Misc/Log Settings Tab).

Check this box if you want to send a message to a Syslog server. In the following drop-down lists choose the facility and the severity of the message to send. The address of the Syslog server has to be defined in the "Log Settings Page".

Send Trap Message:

This type of action appears and can be configured only if you have already specified at least a destination SNMP Server (General/SNMP Tab).

Check this/these box(es) and specify one or two SNMP addresses in the corresponding field if you want to send SNMP messages to one or two SNMP Servers.

Mail to:

This type of action appears and can be configured only if you have already created a destination SMTP Server (General/SMTP Tab).

Check this/these box(es) and specify one or two e-mail address(es) in the corresponding field if you want to send an e-mail to one or two specific user(s). To send e-mails, you will need a SMTP server on the network and you will have to configure its parameters in the "SMTP Page".

Syslog / Trap / Mail Message:

This field appears only if you have already specified at least one destination Syslog Server (Misc/Log Settings Page), one destination SNMP Server (General/SNMP Page) or a destination SMTP Server (General/SMTP Page).

Up to 255 characters may be entered in this free text field. The text will appear in the Syslog, the Trap and the e-mails.

The message can be completed with the status of an input (a power supply or door contact for example) or the value of a sensor (a temperature sensor for example). For this, simply enter, between two percent characters, the ID of the corresponding input device (for details see § 5.1 Sending status and values using rules).

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

3.3.10. Misc / Control Panel

This page is very helpful for the administrator because it gives a complete overview of all the peripherals which are currently connected or have been connected to the ePowerSwitch 8XM. At a glance, the administrator can check the status of the power supplies of the ePowerSwitch 8XM and the connected Peripherals. He can also check the values of the connected sensors, check the status of the connected dry contacts and of course control all the power outlets of the connected ePowerSwitch units.

eol		ePowerSwitch 8XM R2		
neral Sellings Misc Help ntrol Pariel Rule Pariel	Log	Log Settings		
Control Panel			2	
EPS 8XM				
Applied Power Input A Name		Applied Power Input B Name		
Applied] Power Input Aux Name		Open Digital Input 1 Name		
Open] Digital Input 2 Name		Open] Digital Input 3 Name		
Open] Digital Input 4 Name		Open Digital Input 5 Name		
Open] Digital Input 6 Name		Open Digital Input 7 Name		
Open] Digital Input 8 Name		Applied VO Extension Module		
On] Power Outlet 1 Name	On C)# Restart	On Power Outlet 2 Name	On Ott Restart	
On] Power Outlet 3 Name	On Off Restart	On Power Outlet 4 Name	On Off Restart	
On] Power Outlet 5 Name	On Off Restart	On Power Outlet 6 Name	On Off Restart	
On] Power Outlet 7 Name	On Off Restart	On Power Outlet 8 Name	On Off Restart	
Closed Digital Output 1 Name	Upon Close Pulse Upon Pulse Close	Closed Digital Output 2 Name	Upon Close Pulse Upon Pulse Close	
Closed Digital Output 3 Name	Upen Close Pulse Upen Pulse	Closed Digital Output 4 Name	Upon Close Pulse Upon Pulse	

3.3.11. Misc / Rule Panel

This page shows all the rules the administrator has created and activated. The rules which have been executed can also be highlighted in different colours according to the emergency of the action. The highlight colours can be customized during the creation of the rule (Settings/Rules Page).

Rule Panel	a
	-
Ping R1: Server Does NOT Respond	0.2 A R2: Current Consumption Over 0.1
0.2 A R3: Current Consumption Over 0.4 A	0.2 A R4: Current Consumption
0.2 A R5: Current Consumption A	Off]R6: Push Button >3 Sec Lamps = Off
Off R7: Push Button 1 Sec Lamps = On	

For supervision purpose, the administrator can create special accounts which display only some specific rules. In the example below, the user Bill has the possibility to supervise 4 rules and to see on a glance the rules which have been triggered.

Neol	ePowerSwitch 8	KM R
BIII		
0.2 A R2: Current Consumpt Over 0.1	R3: Current Consumptio	n
0.2 A R4: Current Consumpt	0.2 A R5: Current Consumptio Over 0.1 A	" 🔺

The page is automatically refreshed every 10 seconds. Unlike a standard session, the web server of the ePowerSwitch 8XM won't automatically close this kind of session. Opening many sessions of this affects the performances of the web server.

3.3.12. Misc / Log

The log file keeps a running log of events and activities occurring on the device. The logs are automatically cleared when the device is rebooted. The file will display up to 2048 recent logs.

verSwitch 8XM R2	ePov			ol
		llelp	Misc	eral Settings
	ng Log Settings	l ng	Rule Panel	strol Panel
2				Log
/ "admin"	ministrator Session open b	5:00:41 Admin	6 Aug 2009	nformational 26
by "admin"	ministrator Session closed	4:59:54 Admin	6 Aug 2009	nformational 26
"admin"	ministrator Session open by	0:02:22 Admin	6 Aug 2009	nformational 26
by "admin"	ministrator Session closed	9:50:41 Admin	6 Aug 2009	aformational 26
/ "admin"	ministrator Session open b	9:45:41 Admin	6 Aug 2009	nformational 26
by "admin"	ministrator Session closed	9:43:08 Admin	6 Aug 2009	nformational 26
"dimin"	ministrator Session open by	9:00:07 Admin	6 Aug 2009	ntormational 26
Dy admin"	ministrator Session closed	9:22:27 Admin	6 AUG 2009	niormational 26
we rower input hux mame has been	date pro cam demo rower in	orlied	e Aug 2009 witched to	Notice 20
Extension Module Name has been	dule EPS 8XM demo Input I/	9:11:38 Modul	6 Aug 2009	nformational 26
admin"	ministrator Seguen erer b	ppileu 9+09+26 Admin	k Ang 2000	stormational 24
by "admin"	ministrator Session closed	9:02:21 Admin	6 Aug 2009	oformational 26
Proximity Input Name has been	dule TP Sensor 4 Name inpu	3:57:38 Modul	4 Aug 2009	nformational 24
Proximity Input Name has been	dule TP Sensor 4 Name Inpu	0107138 Model 1	4 Ang 2009	ntormational
Name (S3) has been connected	dule Power Switch 0-Port 3	6:46:00 Modul	4 3107 2009	Notice 24
has been connected	dule Satellite 2 Name (S2)	6:45:57 Modul	4 Aug 2009	Notice 24
has been connected	dule IP Sensor 4 Name (IP4	6:45:54 Modul	1 Aug 2009	Notice 24
2) has been connected	dule Push Button 2 Name (P	6:45:53 Modul	4 Aug 2009	Notice 24
Name (DIM1) has been connected	dule Digital Input Module	6:45:52 Modul	4 Aug 2009	Notice 24
Name (SS) does not respond	dule Power Switch 8-Port 3	6:45:50 Modul	4 Aug 2009	Alert 24
does not respond	dule Satellite 2 Name (S2)	6:45:49 Modul	1 Aug 2009	Alert 24
docs not respond	dule Push Button 2 Name (P	6:45:46 Modul	4 Aug 2009	Alert 24
Name (UIM1) does not respond	dule Ungital input Module (6:45:46 Modul	4 Ang 2009	Alerti 24
does not respond	dule TP Sensor 4 Name (TP4	6:45:46 Modul	4 Aug 2009	Alert 24
by "admin"	ministrator Session closed	6:01:20 Admin	1 Aug 2009	iformational 24
/ "admin"	ministrator Session open b	5:59:56 Admin	1 Aug 2009	nformational 24
by domin	ministrator Scopion closed	5:5/:2/ Admin	4 Aug 2005	formational 24
M2) has been connected	dula Energy Matar 2 Name (5-36-57 Medul	4 Aug 2009	Notice 24
e (CP1) has been connected	dule AC Current Probe 1 Nat	5:36:51 Modul	4 Aug 2009	Notice 24
(2) has been connected	dulc Push Button 2 Name (P	5:36:50 Modul	4 Aug 2009	Notice 24
Name (DIM1) has been connected	dule Digital Input Module	5:36:49 Modul	4 Aug 2009	Notice 24
has been connected	dule TP Sensor 4 Name (TP4	5:36:47 Modul	4 Aug 2009	Notice 24
has been connected	dule TA Sensor 3 Name (TAS	5:36:16 Modul	1 Aug 2009	Notice 24
has been connected	dulc IH Scngor 2 Name (IH2	5:36:44 Modul	4 Aug 2009	Notice 24
as been connected	dule T Sensor 1 Name (T1)	5:35:43 Modul	4 Aug 2009	Notion 24
Name (S3) has been connected	dule Power Switch 0-Port 3	5::36:42 Modul	4 Aug 2009	Notice 24
has been connected	dule Satellite 2 Name (S2)	5:36:40 Modul	4 Aug 2009	Notice 24
e (S1) has been connected	dule ePowerSwitch 1X5 1 Nam	5:36:37 Modul	1 Aug 2009	Notice 24
been connected	aute ELS SXM demo (MU) has	5:36:36 Modul	4 Aug 2009	NOTICE 24
THE REPORT OF THE PART OF THE PARTIES.	te a lime nave been synchri	station and a second	4 ang 2009	Formational 24
nized to informether are server	siem has been started	o:se:si Syste	a aug 2009	ionational 24

3.3.13. Misc / Log Settings

This page allows you to configure the logs. The Log file is used by the system to record actions, warnings, errors and problems. It is often quite useful to discover the causes of tricky problems. The messages recorded in the log file and sent as copy to a Syslog server are classified into 8 severity levels (Emergency, Alert, Critical, Error, Warning, Notice, Informational and Debug).

Neol			ePo	werSwitch	8XM R2
General Settings	Misc	Help			
Control Pariel Rul	e Panel	Log	Log Sellings		
Log Settings					21
Primary Syslog Server					
Secondary Syslog Server					
	т	The syslog server add	resses the logs will be	sent lo	
Email Address		The email address the	logs will be sent to		
Type of messages to sen	J 🗖 🛛	Emergency			
	Π.	Nert			
		Dritical			
		Error			
		Warning			
		Notice			
		Notice Informational			

Primary Syslog Server:

If you want to enable the ePowerSwitch 8XM to send messages to a Syslog Server, check the box "Syslog Server Address" and enter the address of the Syslog Server you wish to use. You can enter either the hostname or the IP address of a Syslog server. The Syslog uses port 443/UDP.

Secondary Syslog Server:

In this field you can define the IP Address of a secondary Syslog Server.

Example: syslog.ePowerSwitch 8XM.com or 192.168.1.252

Email Address:

If you want to enable the ePowerSwitch 8XM to send e-mails, check the box "e-mail address" and specify the destination e-mail address to be used.

Type of messages to send:

Specify in this field the type of messages you want to send to the specified e-mail address. (for details see Syslog Messages: Severity Level definition).

LOGOUT:

Click "Logout" at the bottom of the page to exit the session without saving changes.

DISCARD CHANGES:

Click "Discard Changes" at the bottom of the page to discard all the changes you have made on this page. **APPLY CHANGES:**

4. POWER OUTLET CONTROL AND PERIPHERALS STATUS

- 1. Start your Web browser and type the IP address of your ePowerSwitch 8XM. The browser displays the authentication dialog box.
- 2. Enter a user name and its corresponding password. The status of the ePowerSwitch 8XM is displayed.

[Applied]Power Input B Name
Open] Digital Input 1 Name
Open Digital Input 3 Name
Open] Digital Input 6 Name
Open] Digital Input 7 Name
Applied VO Extension Module Name
On O
On Off Icotart On Power Outlet 4 Name Off Rostart
Un orr [On] Power Outlet 6 Name Orr Restart Rectart
tin orf On Power Outlet 8 Name Orf Restart
Open Close Pulse Open Pulse Closed Digital Output 2 Name Pulse Close Pulse Close
Upon Cluse Pulse Opon Pulse Closed Digital Output 4 Name Pulse Close Pulse Close

3. In the drop-down list, choose the power control unit you want to control or the peripheral for which you want to know the status.



If you log in as system administrator, you will be able to:

- control all the power outlets and all the power outlet groups of the connected ePowerSwitch devices,
- display the instant values of all the connected sensors (temperature, humidity, ambient light),
- display the status of all digital inputs.

If you log in as a user (ePowerSwitch 8XM handles up to 255 accounts), you will be able to:

- control individually all the power outlets and all the power outlet groups for which you have the rights,
- display the values of all the connected sensors for which you have the rights,
- display the status of all the digital inputs for which you have the rights.

The ON button allows you to switch ON the corresponding power outlet or group of power outlets. The OFF button allows you to switch OFF the corresponding power outlet or group of power outlets. The RESTART button allows you to switch OFF the corresponding power outlet or group of power outlets. The power outlet or group of power outlets will then be automatically switched ON after the delay defined by the administrator (see Settings / power outlets Page).

5. APPENDIX

5.1. Sending status information and sensor values using rules

The administrator can create rules (see Settings/Rules) to trigger actions and send personalized messages in form of Syslog messages, SNMP traps or emails when an event occurs. Moreover, the administrator also has the possibility to complete his messages with status information of an input (a power supply or a door contact for example) or the value of a sensor (a temperature sensor for example).

In the "Syslog/Trap/Mail Message" field of the rule settings page, the administrator has simply to enter the ID of the input of which he wants to send the status or value. This ID is made of the ID of the device where the input is located and the ID of the input itself.

The IDs have to be entered between two percent characters. Many IDs can be specified in the text box but the message must not exceed 255.

Syntax: %[device ID]:[input ID]%

To know all IDs currently used by the system, go to the "Settings/Rules" page and click on "Add a New Rule". The two IDs of the monitored input are displayed in the two fields in the middle of the page.

- To know all Digital Input IDs, choose "Digital Input Monitoring Rule" as Rule Type.
- To know all Analog Input IDs, choose "Analog Input Monitoring Rule" as Rule Type.
- To know all Power Status IDs, choose "Power Supply Monitoring Rule" as Rule Type.

Examples:

- To send the value of the T1 temperature, the administrator could add following line in the "Syslog/Trap/Mail Message" text area:

Temperature is %T1:T1%

- To send the state of the D1 door contact of the DIM1 Digital Input Module, the administrator could add following line in the "Syslog/Trap/Mail Message" text area:

Door contact status is %DIM1:DI1%

Note

The schedule rule can be used to send status information or sensor values on specified weekdays at regular interval.

5.2. Ping and Scan Methods

ePowerSwitch 8XM has two methods to check whether an IP equipment (PC, server, router, Webcam...) is still alive:

Address Pinging:

The first method uses the well-known Ping command whereby a request is sent to a specific IP address. The Ping command, which is an echo request, enables you to determine through an ICMP protocol (Internet Control Message Protocol) if an IP device is available on the network. If the system reacts to this request, ePowerSwitch 8XM knows that the TCP/IP connection is established. If the system does not react to one or several requests, ePowerSwitch 8XM can automatically switch the device off and after a specified delay switch it again on (Reboot function).

Port Scanning:

The second method uses the Port Scan command to test a specific TCP/IP port. In other words, this command allows you to find out if a specific protocol is available on a server (for example HTTP, FTP, Telnet, SMTP, POP...). ePowerSwitch 8XM simply tries to connect to a specific server port. If the connection is possible, ePowerSwitch 8XM knows that a server program is running there. If the connection is not possible, ePowerSwitch 8XM can automatically switch the device off and after a specified delay switch it again on (Reboot function).

- Note
- The Supervision function works only if the ePowerSwitch 8XM is connected to the LAN.
- The Ping and Scan functions can be used separately or together.
- The network route between ePowerSwitch 8XM and the IP device you wish to supervise should be as direct as possible, so do not use unnecessary routers and complex wiring between them. A problem on a router or the wiring could reboot the IP device to supervise.
- Execute several Pings and/or Scans before running the Reboot function. It could be possible that the IP device doesn't respond although it is still working.
- Choose a realistic supervision cycle. One second is possible, however it's not necessary to overload the network with Ping and Scan requests.

Recommended values:

- Interval between Requests: 10 sec or more
- Number of unsuccessful Requests before Reboot: 3 or more
- Delay before Reboot: 10 sec or more
- Delay before restarting monitoring after Reboot: 120 sec or more
5.3. Technical Data

Network standards: IEEE 802.3, 10 / 100 BASE-T Network protocols: TCP/IP, HTTP/HTTPS Network connection: **RJ-45 connector for STP CAT5** Max. network cable length 100 meters Serial connection: RS232, SUB-D 9 female SSL Technology: Version 2 and 3 **Operating temperature:** 0°C to +40°C **Operating humidity:** 10% to 80% RH (not condensing) **Dimensions (LxDxH):** 170 x 110 x 42 mm Weight: 0,63 kg Approvals: CE, EN55022 & EN55024

5.4. Commonly used Ports

TCP 25: This port is used to deliver e-mails over SMTP (Simple Mail Transfer Protocol).

- **TCP 80:** This port is used for http connections.
- **UDP 123:** This port is used to allow time synchronization over NTP (Network Time Protocol).
- UDP 161: This port is used for SNMP Requests.
- **UDP 162:** This port is used for SNMP Traps.
- TCP 443: This port is used to allow SSL support (Secure Socket Layer).
- **UDP 514:** This port is used to deliver Syslog messages.

5.5. Syslog Messages: Severity Level Definitions

The Emergency level is the most severe type of message generated by ePowerSwitch 8XM and the Debug severity level is the least severe one.

Severity Level 0, Emergency:

- The following messages appear at severity 0:
- Continuous error!
- An SMTP Client could not be created

Severity Level 1, Alert:

The following messages appear at severity 1:

- Settings have been reinitialized through the serial connection
- ePowerSwitch 8XM does not respond
- Satellite "number" does not respond
- Sensor "number" does not respond
- Failure on Power Input A of Master M0
- Failure on Power Input B of Master M0
- Failure on auxiliary Power Input of Master M0
- Failure on Power Input A of Satellite (number)
- Failure on Power Input B of Satellite (number)
- I/O Extension Module has been disconnected
- A Mail could not be sent "subject" to "name"
- SMTP Client not available: a Mail could not be sent "subject" to "name"

Severity Level 2, Critical:

The following messages appear at severity 2:

- "file" config corrupted : restoring default values

Severity Level 3, Error:

ePowerSwitch 8XM doesn't generate Severity Level 3.

Severity Level 4, Warning:

- The following messages appear at severity 4:
- Settings have been changed through the serial connection
- Settings have been changed through the network by User "name"

Severity Level 5, Notice:

The following messages appear at severity 5:

- Master M0 has been connected
- Satellite (number) has been connected
- Sensor (number) has been connected
- SSL Key has been reinitialized through the serial connection
- System has been restarted through the serial connection
- Power Supply A of Master restored
- Power Supply B of Master restored
- Auxiliary Power Supply of Master restored
- Power Supply A of Satellite (number) restored
- Power Supply B of Satellite (number) restored
- I/O Extension Module has been connected
- Rule (number) : Outlet (number) of Master has been switched ON
- Rule (number) : Group (number) has been switched ON
- Rule (number) : Dry Contact Output (number) has been open
- Rule (number) : Mail "subject" has been sent to "name"

Severity Level 6, Informational:

The following messages appear at severity 6:

- System has been started
- Date & Time have been synchronized to a Network Time Server
- User "name" : Outlet (number) of Master M0 has been switched ON
- User "name" : Group (number) has been switched ON
- Dry Contact Input (number) has been opened
- Dry Contact Input (number) has been closed
- Dry Contact Output (number) has been opened
- Dry Contact Output (number) has been closed
- Mail "subject" has been sent to "name"
- Session opened by user "name"

Severity Level 7, Debug:

ePowerSwitch 8XM doesn't generate Severity Level 7.

STATEMENT OF CONFORMITY

