



Description

The new ePowerSwitch 8XM+ offers with it's advanced cascading and the associated features enough space for larger infrastructures. A total of 8 IEC320 power outlets are available which can be switched individually or as groups.

The web interface is additionally protected using SSL to provide maximum safety for management and control of the device. A new highspeed RISC processor delivers fast and stable communication with the device. The former I/O extension module is now integrated into the device. 8 digital inputs and 4 digital outputs on the front side allow for easy-to-use sensors, detectors and other applications.

The dual xBus connection port (standard RJ45) is available for extensions (ePowerSwitch 8XS, ePowerSwitch 1XS, sensors etc.) and allows bus or star topology. The system is extendable up to 136 IEC320 power outlets (e.g. 16 x ePowerSwitch 8XS).



Rear connection features

- 2 IEC320-inputs
- 8 IEC320-outputs

Front connection features

- Status-LED for all ports
- RJ45 network connection
- RS232 connection
- MicroSD-Slot
- Reset switch
- Dual xBus connection
- Terminal with 8 digital inputs / 4 digital outputs

Power Distribution

Each network switch can be switched on/off and restarted via IP or RS232 interface. This can be done by the web interface, a KVM switch, SNMP, or any serial interface. They can also be switched single or as individually created group of outlets – including connected expansion units. The sequential on and off switching of each outlet prevents resulting peak loads within the IT environment.

The power outlets are equipped with extremely robust HiAmp relay for high inrush currents. Individual delays (1-255 seconds when you next switch, 1-3600 seconds when restarting) can be configured for the switching process.

Monitoring

Device monitoring

The ePowerSwitch 8XM+ is capable of monitoring up to 136 IP devices with ping or scan commands and send a message (SNMP trap, e-mail, syslog) in case of a crash automatically. If the monitored IP devices are powered by the ePowerSwitch they can be automatically restarted. The combination with VizioGuard monitoring products is possible.

The 8 inputs and 4 digital outputs (with separate 12VDC Output) are accessible through removable screw terminal blocks and allow easy and quick connection of sensors and detectors.

Up to 255 peripherals can be connected to the dual xBus interface and involved in rules in order to trigger emergency actions.

The ePowerSwitch 8XM+ is capable of switching high-current over IP. Any three-phase power supply (Power Contactor/Schütz) can be triggered so you gain full control and safety over your machinery.

Environmental monitoring

With the xBus interface on the front side of the device up to 255 sensors or detectors can be connected by standard CAT cable. The transmission of signals is fully digital and the maximum range is up to 200m. The use of an existing cable infrastructure is easily assured. The inputs can be used in definable rules to trigger automatically any appropriate emergency actions.

Sensors and detectors can be flexibly combined and placed at any desired location in the surveillance area. For example, the optimization of a larger demilitarized zone (eg. hotspots in the air-conditioned area) is possible with only a little effort.

A special function of the device provides an easy integration with your own programs to control the power outlets. With or without authentication, depending on your needs.

Management

The management and control of the device using the integrated web server through the web browser is quite simple. Moreover, it is possible to send switching commands via a connected KVM switch or a terminal console.

Authentication

All current ePowerSwitch devices use a nonce (cryptographic nonce) and a hash function for authentication so the access can not be reconstructed or manipulated. To support fully encrypted transmission of data corresponding devices are available (e.g. ePowerSwitch 8XM or VizioGuard).

User accounts

The administrator can create up to 40 user accounts with different rights via the web interface. Access to the webserver is protected by 32-character user names and passwords. In addition, up to 40 users may simultaneously access the ePowerSwitch and all connected xBus peripherals.

Grouping of power outlets

The grouping of power outlets allows a server with redundant power supplies or multiple devices to be turned on/off with a command sent through a web browser or by SNMP. With the ePowerSwitch 8XM+ it is possible to create any groups. Connected expansion devices (for example, the ePowerSwitch 8XS) are captured and managed too. The number of power outlets within the group is arbitrary.

Programmable rules

Up to 32 rules can be configured to monitor analog values and digital inputs. Pre-programmed actions will be triggered on alarm state which will switch e.g. relay or sockets. Optional e-mails, SNMP traps or syslog messages can be sent.

Timer and scheduler

The device offers the possibility to automatically operate the power outlets by a timer and/or a scheduler function. Individual poweroutlets but also groups will be turned on/off at defined times. It is also possible to automatically send e-mail, SNMP traps and syslog messages with the scheduler. By using a Internet connection the option to trigger an action on remote ePowerSwitch devices is given.

Designations

Up to 32 characters long names can be set to all devices and sensors connected. This unique identification simplifies the programming of rules, groups and the associated actions.

Online help

An intuitive interface and context-sensitive online help allow administrators to quickly enable various and powerful features of the system. Detailed instructions and explanations are listed in the operating instructions.

Features at a glance

- Remote control of 8 to 136 power outlets or outlet groups.
- SSL 128 bit technology.
- Dual voltage input.
- Access protection via username and password up to 32 characters (one administrator and up to 255 user accounts)
- Grouping current outputs (any numbering).
- Sequential power-up to avoid inrush currents on reboot.
- Free definable names for appliances, power outlets, groups, rules...
- Programmable time intervals for reboot and power-on.
- Up to 255 rules: IP devices, dry contact and power monitoring, environmental monitoring (temperature, humidity...) and pre-programmed rules.
- Easy and fast configuration.
- Requires only 1U of rack space.
- 8 digital inputs and 4 digital outputs (12 VDC) on the front
- Firmware upgrade via network.

Supported peripherals

Up to 255 peripheral devices can be connected to the ePowerSwitch 8XM+.

Sensors

- Temperature and humidity sensor (TRH-Sensor)
- Temperature and ambient light sensor (TL-Sensor)
- Temperature and proximity sensor (TP-Sensor)
- Temperature sensor tiny (T-Sensor Tiny)

Detectors

- Optical liquid detector (LIQ DET)
- Optical smoke detector (SMOKE DET)
- Movement detector (MOVE DET)
- Magnetic reed contact (MAGNETIC CON)

Interfaces

- Dual 0-10V with temperature sensor (0-10 T-Sensor)
- Dual 4-20mA with temperature sensor (4-20 T-Sensor)
- PT100 for platinum measuring resistor (PT100 T-Sensor)

Expansion & Cascade

- 1 power outlet (ePowerSwitch 1XS)
- 8 power outlets (ePowerSwitch 8XS)
- 8 power outlets with 2 x 16A inputs and voltage monitoring (8XS /32)

I/O-Modules

- 8-way terminal with dry input contacts (Digital input module)
- 8-way terminal with dry output contacts (Digital output module)
- Push button with dual action (Push button)

Current probe

- For 1 output (CP IEC)

Technical data

Power input	2 x IEC320 EN60320 C20 (M) 16A Nominal voltage: 100 - 240V / 50Hz Max. current: 16A
Power output	8 x IEC320 EN60320 C13 (F) Nominal voltage: 100 - 240V / 50Hz Max. current/outlet: 10A
Network standards	IEEE 802.3, 10/100 Mbit/s
Network protocols	TCP/IP, HTTP, HTTPS (Version 2 and 3)
Network connection	RJ45 for S/UTP CATx
Max. network cable length	100 m
Terminal connection	RS232, SUB D9 female
Connection Bus	RS485, RJ45
LED	Power, Network, Outlet-Socket
Operating temperature	0°C to +40°C
Operating humidity	10% to 80%
Dimensions (W x H x D)	437 x 42x107
Weight	2.2 kg
Approvals	CE, EN55022 & EN55024, RoHS
Guarantee	2 years repair/replace

Package contents

- 1 EPS 8XM+
- 2 power cords, 1,80 meters IEC-320-C19 / EU
- 1 Network cable
- 1 serial cable (SUB-D9 male/female) 1,80 meters
- 1 CD-ROM with english manual and Windows IP configuration tool