

ePowerSwitch-X



ePowerSwitch-8XM (master)

Browser-based remote power management

The **ePowerSwitch-X** system sets new standards in the functionality of remote IT power management systems. With its unsurpassed security, comprehensive disaster recovery, Syslog support and flexible expansion to up to 136 switchable consumers – located anywhere within the building – it is the ideal solution for large, demanding applications.



ePowerSwitch-8XS (satellite)

Satellite

With **ePowerSwitch-XS**, additional sockets can be added to the **ePowerSwitch-XM** (up to 16 satellites with 136 sockets in all).

May also be controlled through a serial interface with a simple command language, the XS can also be used as a stand-alone device.

ePowerSwitch-X

Key features

- Maximum security: SSL 128-bit, RSA 1024-bit
- Up to 136 sockets, distributed over hundreds of metres
- Event-controlled disaster recovery, e-mail alarm, etc.
- Two independent power circuits (2 x 10 A) per device
- Scheduler with double NTP-synchronization
- 255 users each, socket groups, user-definable actions
- Temperature and humidity sensors, relay inputs and outputs
- Unsurpassed user-friendliness, built-in manual with context help function

Device groupings

Users can define up to 255 socket groups so that any combination of sockets can be switched with a single mouse-click. Delay times can be separately defined for each socket.

User profiles

Up to 255 user profiles can be created, and access rights to groups of or individual consumers assigned to user groups and individual users.

Expansion through control bus

The control bus links a master (with 8 sockets) to up to 16 satellites (also with 8 sockets each), making a total of up to 136 individually switchable consumers. The control bus uses a noise-immune RS 485 interface, allowing remote siting of the **ePowerSwitch** devices – even several hundred metres away from the master – using most types of existing cables, from CAT7 to telephone cables (at least 6-wire). The temperature and humidity sensors are also connected to the control bus and can therefore be located anywhere within the system.

Scheduler, real-time clock and calendar functions

Automatically synchronized to up to two NTP servers, the highly accurate built-in, battery-backed clock with calendar function never has to be manually adjusted.

ePowerSwitch-X

Emergency management – detection, signalling and automatic response

The **ePowerSwitch-X** Master continually monitors all system parameters, such as any power failures and recoveries, including its own, and the operating state of the connected IP-based servers, routers, etc. External events can also be included: up to four thermometers and moisture meters can be monitored, and through eight contact inputs alarm systems, door contacts, smoke and water detectors and other sensors can be connected.

The scheduler and the input signals from these devices can be used to trigger up to 255 user-defined actions, which can include the following:

- Restarting or switching on or off a connected device or group of devices
- Sending e-mails to up to two recipients
- Sending a message with definable severity to the Syslog server
- Switching a low-voltage output contact at the master, for example for alarm bells, emergency coolers or pumps

Switching currents and operating reliability

The **ePowerSwitch-X** has two separate circuits, each with its own power feed and redundant supply of the built-in electronics. To maintain essential functionality (such as logging and sending alarm messages) even when both power sources fail, a third 12-volt power source (PSU or battery) can be connected to the master.

Serial control port

As an alternative to the network, the **ePowerSwitch-XS** satellites can also be controlled through their built-in serial interface using a simple command language.

ePowerSwitch-X

Flexible expansion

ePowerSwitch-8XM (master)

With PC connection cable:
9-pin D-Sub socket/plug
(1.8 m) for configuration and
control; two non-heating
apparatus power cables



ePowerSwitch-8XS (satellite)

With two non-heating appa-
ratus power supply cables,
one PC connection cable:
9-pin D-Sub socket/plug (1.8 m) and an X-BUS cable with 2 x
RJ12 6P6C plug, 30 cm. For other lengths, please enquire.



ePowerSwitch-TRH sensor

For temperature and relative air humidity.



ePowerSwitch-T sensor

For temperature only.

ePowerSwitch-IO EXT BOARD

Extension board for simplified wiring
of the switched inputs/outputs on
the ePowerSwitch-X Master.



WAGO terminals for connecting conductors without tools.
Connected to the master through a 25-pin D-Sub cable
(plug-plug, 1:1). Cable, 1.8 m, supplied. Other lengths (up to
10 m) available on request.

ePowerSwitch-CABMAN

Cable Manager for protection of
IEC320 mains cables against falling
out. The cables are secured with supplied cable ties.
19" – 1 height module.



ePowerSwitch-VMOUNT

Vertical Mounting Kit – for vertical mounting of ePowerSwitch
without loss of rack space.

ePowerSwitch-X Technical Data

Network	IEEE 802.3 – 10/100BaseT – 1 x RJ45 socket (*)
Protocols	TCP/IP, HTTPS, DHCP, SMTP, SSL 128-bit, RSA 1024-bit (*)
User profiles	User-definable names with up to 60 characters <ul style="list-style-type: none"> • One administrator • Up to 255 user profiles, each with user-definable access to each socket and group
Device names	A name can be assigned to each ePowerSwitch (master and satellites). Each consumer (socket) also has a user-defined name.
Groups	Up to 255 groups definable with names. Any assignment of sockets (consumers).
Temperature and humidity sensors	Up to four sensors can be connected at any point on the bus. Power is supplied through the bus. Measured range: -40 to +100 °C (+/- 2°C) – 0 to 100 % rel. air humidity (+/- 5%)
Switched inputs/outputs (*)	D-Sub socket, 25-pin <ul style="list-style-type: none"> • Eight inputs for switching contacts (approx. 2 mA) • Four floating output relays (max. 24 V, 20 mA)
Displays	LEDs for network connection, traffic, 10/100 status, server status. One LED each for the four switched outputs (*). Presence of power supply and switching state of each socket
Expansion through X Control Bus Connectors:	Up to 16 satellites can be connected to each master. Low-interference RS 485 interface. 2 x RJ12 6P6C socket (per master and satellite) – CAT5 cable, about 200 m
Serial interface	Master and satellite: V.24 D-Sub socket, 9-pin
Scheduler/clock	Highly accurate, battery-backed crystal clock, synchronizable through a primary and a secondary NTP server. Autom. summer (daylight-saving) time changeover selectable.
Connector, 230 Volt	IEC 320 (inlet connector for non-heating devices) 2 x plug (mains connection), 8 x socket (consumers)
Max. switching current	Per device Per consumer
Controller power supply	Redundant, through one or both connected power supplies.
Auxiliary power (master only)	Additional power supply for maintaining logging, e-mail notification, etc. 12 volt DC (mains adapter or rechargeable battery).
Voltage range	200 to 250 V
Operating temperature	0 to 50 °C
Humidity	10 to 80 %, non-condensing
Dimensions	Metal enclosure, 19" 1 height unit – 437 x 107 x 42 mm (w x d x h)
Weight	2.0 kg master, 2.1 kg satellite

(*) = master only

ePowerSwitch-X

Remote, High-Security IT Power
Management with Disaster Recovery

NETWORK MANAGEMENT



Solutions for Evolution

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