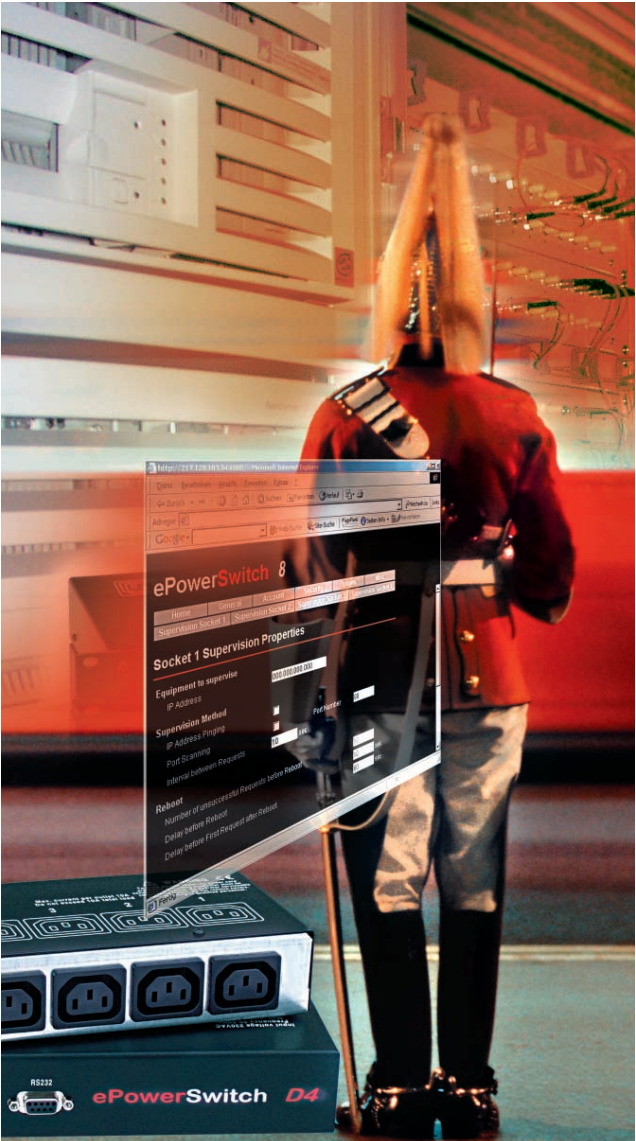


# ePowerSwitch Series

The clever online remote power switch  
For servers, network equipment and other devices

NETWORK MANAGEMENT



Live demo on the Internet: [www.leunig.de](http://www.leunig.de)



## Applications and benefits

In IT systems, it is sometimes necessary to switch devices off and on again. Often, this is difficult due to the equipment's location elsewhere in the building or even at another site or in a different town. LEUNIG addresses this problem with a range of convenient solutions:

The **ePowerSwitch** series is a range of extremely reliable, remotely controllable mains switches with built-in Web server and Ethernet port that allow remote servers, routers and other device to be switched on and off through corporate networks or the Internet with a simple mouse-click.

### Wide range of applications

- Network/device management through IP networks
- Switching any electrical consumer on and off through Ethernet, LAN, WAN or Internet
- Continuous status monitoring
- Active crash recovery through automatic remote reboot (ePS with Guard function)

### Simple operation

- Quick installation
- Works through any graphics-capable browser (e.g. Internet Explorer or Netscape) without special software
- Platform- and operating system-independent
- Addressing through TCP/IP
- User-programmable actuation through the network in Visual Basic, C++, Delphi, etc. or through the V.24 interface with simple text commands

### Advanced security features

- Password-protected access
- User-configurable
- Up to eight user profiles with individually definable access rights for each power outlet
- Auto restart function for routers, proxy servers, etc.
- Maximum availability of connected devices

# ePowerSwitch 1GUARD



Direktronik  
best. nr  
16-0850

## Round-the-clock crash detection with automatic reboot

**ePowerSwitch 1 Guard** is the inexpensive standalone solution of the ePowerSwitch range. The **Guard function** guarantees maximum availability of the network resources, regardless of their location (see Features & Functions).

### Applications

Industrial process control, test labs, etc.; office environments, for example for switching PCs and modems on and off; network management, for example for restarting individual servers and other network equipment, and for monitoring other "unmanned" IP-based devices, such as network printers.

### Key features

- Control through browser or user's own program (via V.24 or Ethernet)
- Configuration via V.24 (using a terminal program), browser or ePowerSwitch Finder
- Optional Guard function
- HiAmp technology
- Auto Restart with adjustable times
- An administrator and a user profile, both with encrypted password-protection
- Switches set to most recent or user-defined states after power failure

# ePowerSwitch 4GUARD

# 4



Direktronik

best. nr

16-0851

## With 4-outlet Guard function for networks and installations

With **ePowerSwitch D4 Guard**, up to four devices can be remotely switched on and off. The Guard function – which can be optionally activated – monitors connected consumers, automatically rebooting any "crashed" devices .

### Applications

Ideal for smaller server applications, central branch management, industrial process control systems, test labs, and telecommunications systems.

### Key features

- Control through browser or user's own program (V.24 or Ethernet)
- Configuration through V.24 (using a terminal program), browser or ePowerSwitch Finder
- Guard function, separately configurable for each of the four power outlets
- HiAmp technology
- Auto Restart with adjustable times
- One administrator and four user profiles, each with encrypted password-protection; definable access to one or multiple outlets
- Switches set to most recent or user-defined states after power failure

# ePowerSwitch 8GUARD

# 8



Direktronik

best. nr

16-0852

Featuring eight dual-power outlets for mission-critical applications

**ePowerSwitch 8 Guard** is a model of flexibility and reliability: with its 8-way Guard function, Dual Power, and Twin Mode, it offers twice the reliability and provides twice the current for up to eight devices. Ideal for small and medium-sized networks, the versatile ePowerSwitch 8 Guard is also well-suited for mission-critical applications and servers with redundant power supplies.

## Applications

Ideal for remote server management on medium-sized server farms, for industrial process control systems, test labs and many other uses, including mission-critical applications.

## Key features

- Control through browser or user's own program (V.24 or Ethernet)
- Configuration through V.24 (using a terminal program), browser or ePowerSwitch Finder
- Guard function, separately configurable for each of the eight power outlets
- Dual Power technology for enhanced reliability and twice the current (20 amperes)
- HiAmp technology
- Auto Restart with adjustable times
- One administrator and eight user profiles, each with encrypted password-protection; full or restricted access to one or multiple outlets
- Switches set to most recent or user-defined states after power failure

# ePowerSwitch

## Features & Functions

### ■ "Guard Functions"

In addition to the convenient, mouse-operated remote switching, ePowerSwitches with the optional Guard function have built-in, active crash protection. Continually monitoring whether the connected IP devices (servers, routers, etc.) are still active, they can automatically reboot any crashed device. Responding much faster than any human administrator can, and just as reliable, ePowerSwitches provide round-the-clock crash protection even with the network down.

### ■ "Dual Power"

ePowerSwitches with Dual Power provide twice the current and twice the reliability: Two isolated circuits with separate fuse protection ensure uninterrupted device operation. On failure of one of the power circuits, an alarm message appears in the browser. Ideal for servers and Network components with redundant power supply unit.

### ■ "Twin Mode"

Additional function for controlling or linking two outlets in separate power circuits. Ideal for applications with redundant power supply.

### ■ "HiAmp"

Especially the "small" servers with inexpensive PSUs can cause current peaks of up to 50 times rated current when they are switched on.

HiAmp ensures that up to 120 amps peak current can flow for each connected device. In addition, to prevent tripping of the built-in fuse or the circuit-breaker, the power outlets are switched on again sequentially after a power failure.

### ■ "Auto-Restart"

Devices like the ePowerSwitch are usually connected "behind" routers, proxy servers, etc. If a remote administrator was to switch the latter off from outside, access would then no longer be possible. This can be prevented with the Auto Restart function, which restarts the corresponding device after a set (to some extent user-definable) time.

### ■ "ePowerSwitch Finder"

Convenient Windows program for finding and configuring all ePowerSwitches in the network (except for ePS socket strips). Can be deactivated.

### ■ "Browser Configuration"

Convenient configuration through a standard browser. Can be deactivated.

# ePowerSwitch

## M8(master)

# M8



Direktronik

best. nr

16-0846

Intelligent server management  
for up to 40 consumers

Dependability and scalability: the **ePowerSwitch M8** has it all. With its exceptional packing density of eight power outlets per 19" height unit, the ePowerSwitch M8 saves precious rack space to provide highly efficient server management. Modular in design, each M8 master can be expanded quickly and easily with up to four S8 slave units to provide power and control for up to 40 consumers. This scalability makes the ePowerSwitch highly flexible and responsive to changing requirements, even in large-scale systems.

Exceptional operating reliability of the connected consumers is ensured by the **Dual Power** function. With two independent, redundant circuits and the option of synchronously switching two sockets, the **ePS M8** is ideal even for mission-critical applications. And with a load capacity of 23 kW, it can handle even high-rated equipment.

### Applications

Ideal for medium-sized to large-scale server farms, data centres and server housing/homing providers, in particular for mission-critical applications.

### Key features

- Modular system, each master expandable to up to 40 consumers
- Comprehensive, convenient configuration through V.24 (using a terminal program) or ePowerSwitch Finder
- Dual Power technology for enhanced reliability and twice the current (20 amperes) per device; up to 100 amp (!) total switching capacity
- Control through browser or user's own program (V.24 or Ethernet)
- HiAmp technology
- Auto Restart with adjustable times
- One administrator and eight user profiles, each with encrypted password-protection; full or restricted access to one or multiple outlets
- Switches set to most recent or user-defined states after power failure

# ePowerSwitch S8(slave)

# S8



Direktronik

Modular slave for ePowerSwitch M8 best. nr  
16-0848

Highly scaleable: As slave unit to the M8 master, the **ePowerSwitch S8** allows the M8 unit to be expanded to supply individually switchable power up to 40 separate consumers.

Used without master, up to four **ePowerSwitch S8** units can be cascaded to comprise up to 32 switchable power outlets. Here, too, the units' **Dual Power** function and **HiAmp** technology guarantee exceptional dependability and current loads up to 20 amps per consumer.

## Applications

Ideal for server farms, data centres, server housing/homing providers and also industrial process control systems. Can also be controlled by terminal servers in server housing.

## Key features

- Control through V.24 serial interface (if used without master)
- Simple control and polling through plain-text communication (V.24)
- Dual Power for exceptionally high switching capacity and operating reliability
- HiAmp technology for problem-free power-up of servers with high peak currents



# ePowerSwitch -4Classic

(models: D, CH, F, UK)



Direktronik  
best. nr  
16-0840

## The intelligent power strip

The original: the first socket strip with built-in Web server. Simply log in to the **ePowerSwitch's** built-in website to switch up to four power outlets on and off with a simple mouse-click. Special feature: during a power failure, the **ePowerSwitch** "remembers" the latest switching states and re-establishes them when power is restored.

### Applications

Ideal for smaller server applications in office and industrial environments and for many other uses.

### Key features

- Control through browser or user's own program (V.24 or Ethernet)
  - Configuration through V.24 (using a terminal program), browser or ePowerSwitch Finder
  - Auto Restart function
  - One administrator and four user profiles, access to one or multiple sockets
  - Switching states are re-established after power failure
  - Staggered restarting of consumers after power failure (as with all ePowerSwitch units)
  - Four socket types, covering most European countries
- ePS D:** Germany, Austria, Finland, Netherlands, Luxembourg, Sweden, Norway, Spain, Portugal, Turkey
- ePS F:** France, Belgium
- ePS CH:** Switzerland
- ePS UK:** United Kingdom

# ePowerSwitch (ePS) Technical details



Function	ePS-M/S in master/slave mode <sup>(1)</sup>	ePS-S8 Slaves only (serial control) <sup>(2)</sup>	ePS-8 Guard	ePS-4 Guard	ePS-1 Guard	ePS-4 D / CH / F / UK
Number of switchable devices	8-40	8-32	8	4	1	4
Number of IP addresses	1	-	1	1	1	1
Ethernet port	●	-	●	●	●	●
Operation through Browser	●	-	●	●	●	●
Configuration						
Through serial interface	●	-	●	●	●	●
Through browser (Ethernet)	-	-	●	●	●	●
Through Windows program (Ethernet)	●	-	●	●	●	●
User programmable through Ethernet	●	-	●	●	●	●
User programmable through V.24	●	●	●	●	●	●
Guard function (automatic reboot)	-	-	8	4	1	-
"Dual Power" <sup>(3)</sup>	●	●	●	-	-	-
"Twin Mode" <sup>(4)</sup>	●	-	-	-	-	-
Adjustable on-delay (for Auto Restart)	●	-	●	●	●	●
230 V mains connections	2 x IEC320 <sup>(5)</sup>	2 x IEC320 <sup>(5)</sup>	2 x IEC320 <sup>(5)</sup>	IEC320 <sup>(5)</sup>	IEC320 <sup>(5)</sup>	Four socket types D / CH / F / UK
Installation housing	19"-1 height metal	19"-1 height metal	19"-1 height metal	metal	metal	socket strip 19" or wall-mounted
Switching current voltage	2x10A 230 volts	2x10A 230 volts	2x10A 230 volts	10A 230 volts	10A 230 volts	10A 230 volts
Continuous current/peak (short-term) current per outlet	10 / 120 A	10 / 120 A	10 / 120 A	10 / 120 A	10 / 120 A	10 / 120 A

Subject to alterations. Errors and omissions excepted

#### Footnotes

<sup>(1)</sup> Used as master or cascaded: one master and 1 to 4 slaves (ePowerSwitch S8)

<sup>(2)</sup> Used without master (serial control through V.24).

<sup>(3)</sup> Two separate, mutually isolated power supplies. Dual current. Two redundant power supplies for built-in server.

<sup>(4)</sup> Grouping (common actuation) of 2 sockets each in the redundant circuits.

<sup>(5)</sup> IEC320 = inlet connectors for non-heating apparatus

Your local dealer:

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