

ELTAKO POWERLINE

THE IDEAL SUPPLEMENT TO THE ELTAKO WIRELESS BUILDING SYSTEM WITH ENOCEAN.

THE ELECTRICITY WIRING IN BUILDINGS ACTS AS THE ELTAKO POWERLINE BUS. NOW YOU CAN TRANSMIT SENSOR DATA AND TELEGRAMS TO ACTUATORS OVER THE EXISTING ELECTRICITY WIRING INSTEAD OF BROADCASTING WIRELESS TELEGRAMS - THAT IS THE BASIC DIFFERENCE BETWEEN THE TWO TECHNOLOGIES.



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THE IDEAL SUPPLEMENT TO THE ELTAKO WIRELESS BUILDING SYSTEM WITH ENOCEAN

The building's electrical wiring serves as the ELTAKO Powerline bus. Sending sensor data via telegrams over existing power lines to the actuators, instead of as radio telegrams within the room, is the most significant difference between the two technologies.

ELTAKO, the largest EnOcean provider in Europe, has seamlessly integrated these two technologies into a single system in collaboration with the manufacturer of SIENNA Powerline.

With the FPLG14 wireless Powerline gateway, in conjunction with the FAM14 wireless antenna module, telegrams are exchanged bidirectionally between the building's wireless network and the building's electrical grid.

Existing installations can thus be complemented by both systems, and for new installations, the proportion of wireless and Powerline ultimately depends on practicality. The installation costs are virtually identical. The powerline components are also monitored and operated by the GFVS building automation visualisation and control software and the FGSM14 wireless GSM module for a direct smartphone connection.

This further enhances the importance of the central installation with Series 14 actuators: wireless, conventional sensors with FTS14EM, and now also powerline with FPLG14 can be connected to it.

The powerline system consists of decentralised actuators with sensor inputs for switching and dimming at the same location, decentralised actuators without their own sensor inputs for switching and dimming at other locations, and decentralised devices with only a sensor input for remote control.

Modules with the same group and address settings (via screwdriver) on the front panel are automatically connected.

Central control buttons and other special functions are assigned to the same groups with a single turn. External access is protected by encrypted apartment addresses.

The system in the building now ranges from simple remote switches to high-tech wireless sensors.

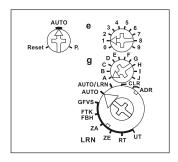


WIRELESS POWERLINE GATEWAY FPLG14 AND WIRELESS POWERLINE TUNNEL GATEWAY FPLT14





Function rotary switches



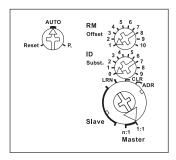
Standard setting ex works.



Manuals and documents in further languages: https://eltako.com/redirect/FPLG14



Function rotary switches



Standard setting ex works.



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Manuals and documents in further languages: https://eltako.com/redirect/FPLT14

FPLG14





Wireless Powerline gateway. Bidirectional. Standby loss only 0.4 watt.

Modular device for DIN-EN 60715 TH35 rail mounting.

2 modules = 36 mm wide, 58 mm deep.

Supply voltage 230 V.

Connection to the ELTAKO RS485 bus. Bus cross wiring and power supply with jumper.

This gateway translates wireless and Powerline telegrams in both directions.

Operation in conjunction with FAM14 or FTS14KS.

Controller control functions for dimming, heating and shading are also possible.

All Powerline telegrams from the electricity wiring system are automatically translated into RS485 bus telegrams and may also be sent as wireless telegrams by connected FTD14 devices.

Only wireless and RS485 bus telegrams taught into the FPLG14 are translated into Powerline telegrams and modulated onto the electricity wiring system. Up to 120 different addresses. Teach-in takes place by means of rotary switches on the front of the devices or using the PCT14 as described in the user's manual.

FPLG14	Wireless Powerline gateway	Art. No. 30014070	100,00 €/pc.
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FPLT14





Wireless Powerline tunnel gateway. Uni- and bidirectional. Standby loss only 0.4 watt.

Modular device for DIN-EN 60715 TH35 rail mounting.

2 module = 36 mm wide, 58 mm deep.

Supply voltage 230 V.

Connection to the ELTAKO RS485 bus. Bus cross wiring and power supply with jumper.

This gateway transmits RS485 bus telegrams over powerline with large distance over the electrical net. Minimum 2 pcs FPLT14 are required.

Up to 10 FPLT14 can unidirectionally send the bus telegrams of their FAM14 / FTS14KS installation with Powerline to another FAM14 / FTS14KS installation via a local FPLT14.

Teach-in up to 120 telegram IDs according to the operating instructions, also with PCT14.

Two FPLT14 can exchange the bus telegrams bidirectionally from 2 FAM14 / FTS14KS installations with Powerline via the installed wires. Teach-in up to 120 telegram IDs according to the operating instructions, also with PCT14. Because of the transmission delay, short-click evaluations for FUD and FSB actuators are not possible.

FPLT14	Wireless Powerline tunnel gateway	Art. No. 30014078	100,00 €/pc.









Manuals and documents in further languages:
https://eltako.com/redirect/PL-EGW

PC software SIENNA-Professional page 11.

PL-FGW



Powerline wireless gateway. Bidirectional. 53×43 mm, 40 mm deep for mounting in 58 mm switch boxes. Standby loss 1.1 watt.

Supply voltage 230 V. Power consumption in operation 1.1 watt.

Powerline telegrams from the grid taught-in into the gateway are automatically transformed and sent into ELTAKO wireless telegrams.

Wireless telegrams taught-in into the gateway are transformed into powerline telegrams and modulated to the power supply grid.

By pressing the reset button, the PL-FGW will be put into the teaching-in mode. The rotary switch selects, whether wireless or powerline telegrams should be taught-in.

One being taught powerline sensor is automatically assigned by operating in the learning mode , a free radio channel.

Up to 80 Powerline sensors or feedbacks can be taught-in. The function as a universal, direction or central pushbutton for a taught-in wireless sensor is assigned via slide switch of the PL-FGW. The Powerline address is set via rotary switch g and e which should be addressed with the wireless sensor. In addition to wireless switches also ELTAKO wireless sensors such as window contacts and motion detectors can be taught-in. Also control functions of the controller for dimmer switches and roller shutter control is possible. The implementation into practical Powerline telegrams für PL actuators is done automatically. Up to 100 different wireless sensor can be taught-in.

All entries and configurations can also be accessed via the mains using the Sienna Professional PC software (see page 4-9). This can then be used to select other functions that are not available through direct teach-in using a rotary switch. In addition, the gateway can be set into the learn and deletion mode, so that a manual teaching-in can be carried out without direct access to the device.

The PL-FGW also serves as a relay station for communication between the temperature controller PL-SAMTEMP with EnOcean actuator FKS-MD1. Up to 20 actuators and PL-SAMTEMP are managed here.

	PL-FGW	Powerline wireless gateway	Art. No. 31100010	150,60 €/pc.	
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Manuals and documents in further languages: https://eltako.com/redirect/PL-RPT

PC software SIENNA-Professional page 11.

PL-RPT



Powerline repeater. 53×43 mm, 25 mm deep for mounting in 58 mm switch boxes. Standby loss only 0.5 watt.

The repeater supports greater ranges. With cable lengths of $> 300 \, \text{m}$ the repeater is normally located in a distributor between the sensor and the actuator.

The repeater repeats commands from sensors with the same address g, e.

Feedback messages from actuators are not repeated.

Two rotary switches are located on the front to assign addresses:

The left-hand rotary switch determines the group address g with 16 alphanumeric digits from A to P. The right-hand rotary switch determines the element address e with 16 numerical values.

Above it is a slide switch which is a configuration switch with positions 0, 1 and 2.

Position 0: Central commands are repeated irrespective of the repeater's e address. With address g, e=0, only central commands are repeated.

Position 1: With address g, e=0 at the repeater, all commands of group g are repeated.

Position 2: Unassigned.

All entries and configurations can also be accessed via the mains using the Sienna Professional PC software (see page 4-9). Addresses can be changed live or without voltage.

On the left of the rotary switches is a red LED to display all activities.

Next to that is the Reset button and to the right of that is Service Pin (P).

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm².

PL-RPT	Powerline repeater	Art. No. 31000030	101,70 €/pc.
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DECENTRALISED ACTUATOR PL-SAM1L WITH SENSOR INPUT 230 V AND DECENTRALISED ACTUATOR PL-SAM2L WITH SENSOR INPUTS





Manuals and documents in further languages: https://eltako.com/redirect/PL-SAMIL

PC software SIENNA-Professional page 11.

Typical connections on page 13.





Manuals and documents in further languages: https://eltako.com/redirect/PL-SAM2L

PC software SIENNA-Professional page 11.

Typical connections on page 13.

PL-SAM1L





Powerline actuator with 1 channel with sensor input. 53 x 43 mm, 25 mm deep, for mounting in 58 mm switch boxes. Used as impulse switch or relay. 1 NO contact not potential free 10 A/250 V AC, incandescent lamps 2000 watts. Sensor input 230 V. Standby loss only 0,5 watt. To control and switch at the same place.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Sensor input functions as pushbutton (impulse switch).

Position 1: Sensor input functions as NO contact (relay).

Position 2: A change-over switch is evaluated as a pushbutton.

All entries and configurations can also be accessed via the mains using the PC software SIENNA Professional (see page 4-9). This means that another configuration can also be set that is not available via the rotary switches:

Position 3: Sensor input acts as NO contact (relay inverse).

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm².

PL-SAM1L		Art. No. 31100001	113,30 €/pc.
	230 V		

PL-SAM2L





Powerline actuator with 2 channels. 53×43 mm, 25 mm deep for mounting in 58 mm switch boxes. Used as impulse switch or relay. 1+1 NO contacts not potential free 5 A/250 V AC, incandescent lamps 1000 watts. 2 sensor inputs with internal low voltage. Standby loss only 0,5 watt. To control and switch at the same place.

Use only potential free switching elements. Internal low voltage applied to the sensor inputs. Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15. Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Sensor inputs function as pushbuttons (impulse switches).

Position 1: Sensor input functions as NC contact (relay).

Position 2: A change-over switch is evaluated as a pushbutton.

All entries and configurations can also be accessed via the mains using the PC software SIENNA Professional (see page 4-9). This means that another configuration can also be set that is not available via the rotary switches:

Position 3: Sensor input acts as NO contact (relay inverse).

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm². Next to them are three wires with wire end-sleeves for the two control inputs with internal low voltage.

PL-SAM2L	Powerline actuator 2 channels with	Art. No. 31200001	115,30 €/pc.
	2 sensor inputs		

VENETIAN BLIND ACTUATOR PL-SAM2 WITH SENSOR INPUTS







Manuals and documents in further languages:
https://eltako.com/redirect/PL-SAM2

PC software SIENNA-Professional page 11.

Typical connections on page 13.

PL-SAM2



Powerline Venetian blind actuator for 1 motor. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. 1+1 NO contact for motors up to 3 A. 2 sensor inputs with internal low voltage. Standby loss only 0,5 watt. To control and switch at the same place.

Use only potential free switching elements. Internal low voltage applied to the sensor inputs.

The control inputs can be used for a Venetian blind pushbutton or a Venetian blind switch.

The runtime is preset to 120 seconds. This can be changed using the PC software **SIENNA-Professional**. Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Start and stop by pressing Venetian blind pushbutton. Auto stop at end.

Position 1: Comfort switch for Venetian blind slat adjustment. Tip briefly to adjust slats.

>1 second same as position 0.

Position 2: Tip pushbutton to operate, release to stop. Auto stop at end.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm². Next to them are three wires with wire end-sleeves for the two control inputs with internal low voltage.

PL-SAM2	Powerline Venetian blind actuator for	Art. No. 31100002	115,30 €/pc.
	1 motor		

DECENTRALISED UNIVERSAL DIMMER ACTUATOR PL-SAMDU WITH SENSOR INPUT 230 V AND DECENTRALISED DIMMER ACTUATOR PL-AMD10V 1-10 VOLT





Manuals and documents in further languages:
https://eltako.com/redirect/PL-SAMDU

PC software SIENNA-Professional page 11.

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Manuals and documents in further languages: https://eltako.com/redirect/PL-AMD10V

PC software SIENNA-Professional page 11.

Typical connections on page 13.

PL-SAMDU







Powerline universal dimmer actuator. 53 x 43 mm, 40 mm deep for mounting in 58 mm switch boxes. Power MOSFET up to 300 W. Automatic lamp detection. Sensor input 230 V. Standby loss only 0,6 Watt. To control and dim at the same place.

Universal dimmer switch for lamps up to 300 W, dependent on ventilation conditions. Dimmable 230 V-LED lamps and dimmable energy saving lamps ESL, additionally dependent on the lamps electronics. No minimum load.

Zero passage switching with soft ON and soft OFF to protect lamps.

Short-time control commands switch on/off, permanent control varies the brightness to the maximum or minimum level. A interruption of control changes the direction of dimming. The brightness level is stored on switch-off (memory). Minimum and maximum brightness can be changed with SIENNA Professional. In case of a power failure the switch position and the brightness stage are stored and may be switched on when the power supply is restored.

Automatic electronic overload protection and overtemperature switch-off.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15. Above it is a slide switch which acts as a configuration switch:

The position AUTO1 allows the dimming of all types of lamps up to 300 watts.

The position LC1 is a comfort position for LED lamps up to 150 watts which are not being dimmed down enough when set to AUTO (trailing phase angle) dependent on the construction and must therefore be forced to leading phase angle.

The position AUTO2 allows the dimming of all types of lamps up to 300 watts.

Increased minimum brightness compared to AUTO1.

All entries and configurations can also be accessed via the mains using the PC software SIENNA Professional (see page 4-9).

In position LC1 no inductive (wound) transformers should be used. In addition, the maximum number of dimmable LED lamps can be lower than in the AUTO position dependent on the construction.

Mixing of L loads (inductive loads, e.g. wound transformers) and C loads (capacitive loads, e.g. electronic transformers) is not permitted. R loads (ohmic loads, e.g. 230 V incandescent lamps and halogen lamps) may be added anytime.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm².

PL-SAMDU	Powerline universal dimmer actuator	Art. No. 31100008	130,70 €/pc.
	1 channel with sensor input 230 V		

PL-AMD10V





Powerline dimmer actuator 1-10 V. 53×43 mm, 25 mm deep, for mounting in 58 mm switch boxes. To switch and/or dim via a 1-10 V interface. 1 NO non-floating contact 600 VA. Standby loss only 0.5 watt. To activate and dim at different places.

Current sink of max. 30 mA for active and passive electronic ballasts. A Powerline sensor input is required for activation. Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P.

The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which has no function here.

All entries and configurations can also be accessed via the mains using the PC software SIENNA Professional (see page 4-9). Minimum and maximum brightness can be changed with SIENNA Professional. To the left of the rotary switches is a red LED which indicates all activities. Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions. The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm².

PL-AMD10V	Powerline dimmer actuator 1-10 V	Art. No. 31100006	122,80 €/pc.

DECENTRALISED TLZ ACTUATOR PL-SAMILT WITH SENSOR INPUT 230 V AND DECENTRALISED ACTUATOR PL-SMIL WITH SENSOR INPUT 230 V







Manuals and documents in further languages:
https://eltako.com/redirect/PL-SAM1LT

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Typical connections on page 13.





languages: https://eltako.com/redirect/PL-SM1L

PC software SIENNA-Professional page 11.

Typical connections on page 13.

PL-SAM1LT



Powerline TLZ (staircase time switch) actuator with 1 channel. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. Off delay settable from 1 minute to 120 minutes. Switch-off early warning settable. 1 NO contact not potential free 10 A/250 V AC, incandescent lamps 2000 watts. Sensor input 230 V. Standby loss only 0,5 watt. To control and switch at the same place.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch determines the off-delay time.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Pushbutton at sensor input with subsequent switching.

Position 1: Same as Position 0 but with switch-off early warning.

Position 2: A change-over switch is evaluated as a pushbutton.

All entries and configurations can also be accessed via the mains using the PC software SIENNA Professional (see page 4-9).

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm².

PL-SAM1LT	Powerline TLZ actuator 1 channel with sensor input 230 V	Art. No. 31100004	115,30 €/pc.
	input 250 v		

PL-SM1L



Powerline sensor input with 1 channel. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. Sensor input 230 V. Standby loss only 0,5 watt. To control and switch at different places.

When pressed, the sensor input acts on all actuators with the same address or as a central pushbutton if element address 0 is used.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above it is a slide switch which acts as a configuration switch with positions 0, 1 and 2.

Position 0: Sensor input with reset function as pushbutton.

Position 1: Sensor input functions as NO contact.

Position 2: A change-over switch is evaluated as a pushbutton.

All entries and configurations can also be accessed via the mains using the PC software SIENNA Professional (see page 4-9).

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm².

PL-SM1L	Powerline sensor input 230 V	Art. No. 31100007	109,20 €/pc.

DECENTRALISED 8-CHANNEL SENSOR INPUT PL-SM8 AND TEMPERATURE CONTROLLER PL-SAMTEMP FOR HEATING AND COOLING



languages: https://eltako.com/redirect/PI -SM8

PC software SIENNA-Professional page 4-9.

Typical connections on page 13.





Manuals and documents in furth languages: https://eltako.com/redirect/

PL-SM8



Powerline sensor input with 8 channels. 53 x 43 mm, 25 mm deep for mounting in 58 mm switch boxes. 8 sensor inputs with internal low voltage. Standby loss only 0,5 watt. To control and switch at different places.

Use only potential free switching elements. Internal low voltage applied to the sensor inputs.

Two rotary switches are located on the front for address assignment:

The left rotary switch defines the group address g with 16 alphabetical values from A to P. The right rotary switch defines the element address e with 16 numerical values from 0 to 15.

Above them is a slide switch which functions as a configuration switch.

Position 0: 2 adjacent inputs as direction pushbuttons for UP/DOWN or ON/OFF.

Position 1: All sensor inputs function separately as NO contacts.

Position 2: All sensor inputs function separately as pushbuttons.

This setting always affects all 8 inputs. The setting can only be changed after a reset.

To the left of the rotary switches is a red LED which indicates all activities.

Next to it is a reset pushbutton and to the right of that is a service pin. For functions, please refer to the operating instructions.

The terminals located above are plug-in terminals for conductor cross-sections of 0.2 mm² to 1.5 mm².

The addresses of the 8 inputs can also be freely assigned if necessary using the PC software SIENNA-

Professional

The socket strip located above this has 9 plug-in wires with wire end-sleeves.

8 control inputs with internal low voltage.

PL-SM8	Powerline sensor inputs, 8 channels, internal low voltage	Art. No. 31800001	115,30 €/pc.
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PL-SAMTEMP



Powerline temperature controller with display, white, 55×55 mm, for mounting in switch systems. In addition a floating control contact 3 A/250 V AC for direct connection of heaters and coolers. Standby loss only 0,4 watt.

The scope of supply comprises a frame R1E and an intermediate frame ZR65/55 for the E-Design, the temperature controller upper part and a bottom part for attachment in 55 mm flush-mounted boxes. The complete display can be removed from the frame for screw mounting.

In normal mode the current room temperature is indicated in the display as well as icons for 'present' or 'absent' and for 'heating on' or 'cooling active'.

Press the pushbuttons λ (absent) and Φ (present) to activate the associated setpoint.

In setup mode as described in the user's manual, press pushbuttons \triangle and ∇ to display the setpoint and actual temperatures and change the setpoints.

Control heating or cooling with Powerline actuators SAM1L, SAM2L or the thermostat outputs.

In addition to heating/cooling, a PWM mode for underfloor heating can be set.

All settings can also be made via SIENNA Professional.

PL-SAMTEMP	Powerline Temperature controller for heating and cooling	Art. No. 31000010	217,30 €/pc.
	and cooming		









PL-SW-PROF

Coupling element with USB cable and 230 V power pack for connecting a computer to the Powerline network.

The 'SIENNA® Professional' PC software for installing and configuring the Powerline devices from the PC is available for download at eltako.com.

'SIENNA® Professional' is a Windows-based program for installing and configuring all PL and SIENNA components and is designed for electricians.

The Powerline system can be installed and configured either with a screwdriver or a PC. All configuration changes can be made from the PC.

Existing installations in a building can also be read out and recorded.

The bus is coupled via a USB port on the PC. Thanks to Powerline technology, the nearest socket can be used for bus connection.

Download according to the included installation instructions.

SYSTEM REQUIREMENTS, LAPTOP/PC			
Processor	Intel® Pentium® III 366 MHz oder höher		
Operating system	Server 2003, Windows XP, Vista (32 Bit), Windows 7 (32 Bit), Windows 8 (32 Bit and 64 Bit), Windows 10		
Programming environment	Microsoft .NET Framework 3.5 SP1 or higher		
Hard disc memory	32 MB free space on hard disc		
RAM memory	128 MB RAM		
Screen resolution	1024 x 768		
Interface	USB 1.1, 2.0 or 3.0		
TECHNICAL DATA ECHELON COUPLING ELEMENT PL-20			
Technology	Powerline communication on B/C tape (5 Kb/s); acc. to FCC, CENELEC EN50065-1 and LONWORKS® protocol		
Bus coupler	Fused safety socket, 230 V~/50 Hz		
PC coupler	USB 1.1 or 2.0		
Current draw	Mains plug/power supply unit: maximum 250 mA at 18 V DC voltage. USB: maximum 50 mA at 5 V DC voltage		
Processor type	Neuron processor integrated in Powerline Smart Transceiver PL 3120		
Temperature range	-25°C to +70°C		

PL-SW-PROF	Software PL-SW-PR0F	Art. No. 31000020	593,75 €/pc.*
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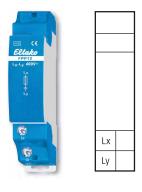
MAINS FILTER NF2A AND WIRELESS POWERNET PHASE COUPLER FPP12





Manuals and documents in further languages:

https://eltako.com/redirect/NF2A





Manuals and documents in further languages:

https://eltako.com/redirect/FPP12

NF2A

The mains filter up to 2 A 230 V/50 Hz is designed as a built-in filter. It attenuates interference signals from the consumer to the actuator and prevents that disturbances from the connected consumers are reaching the house network. Frequency range 110-140 kHz.

For installation mounting. 49 mm long, 32 mm wide, 24 mm deep.

NF2A Mains filter up to 2 A, 230 V/50 Hz Art. No. 30000028 38,10 4	:/pc.
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* The software part is not discountable.

FPP12



Wireless Powernet phase coupler to transmit wireless telegrams over the 230 V power mains. Only 0.2 watt standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting.

1 module = 18 mm wide, 58 mm deep.

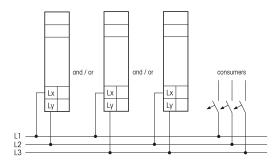
Voltage between the two outer conductors: 400 V/50 Hz.

Frequency range 115-132 kHz.

The phase coupler increases the capacitive coupling between 2 different outer conductors if, for example, the cables within the installation are not laid in parallel at a distance of at least several metres apart (as ribbon cables or jacketed cables).

Caution: The phase coupler may only be connected to the input side of the line circuit-breaker.

Typical connection

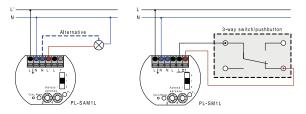


FPP12	Wireless Powernet phase coupler	Art. No. 30000051	34,00 €/pc.
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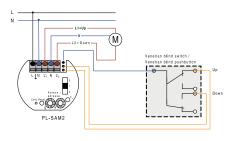
TYPICAL CONNECTIONS



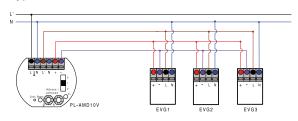
Typical connection PL-SAM1L Additional switching point for an existing consumer



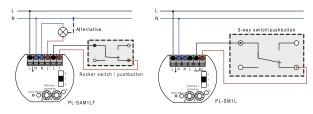
Typical connection PL-SAM2



Typical connection PL-AMD10V

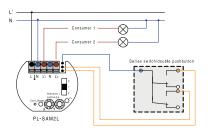


Typical connection PL-SAM1LT Delayed switch-off

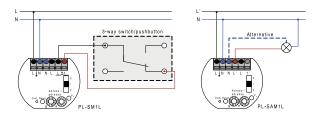


(e.g. staircase time switch or circulation pump) SAM1LT switches itself and associated actuators off after a preset time.

Typical connection PL-SAM2L

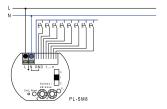


Typical connection PL-SM1 Switch an additional consumer

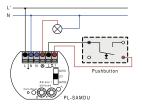


(e.g. mirror light in bathroom, socket in living room, outside light)

Typical connection PL-SM8



Typical connection PL-SAMDU



TECHNICAL DATA POWERLINE DEVICES

Туре	PL-SAMDU	PL-AMD10V	PL-SAM1L PL-SAM1LT	PL-SAM2L	PL-SAM2
Contacts					
Contact material/contact gap	Power Mosfet	AgSnO ₂ /0.5 mm			
Spacing of control connections/contact	-	-	3 mm	3 mm	3 mm
Test voltage control connections/contact	-	-	2000 V	2000 V	2000 V
Rated switching capacity each contact	-	600 VA 4)	10A/250V AC	5A/250V AC	3A/250V AC
Incandescent lamp and halogen lamp load $^{1)}230V,$ I on $\leq 70A/1014ms$	up to 300 W ²⁾	-	2000 W	1000 W	-
Inductive laod cos ϕ = 0.6/230 V AC inrush current \leq 35 A	up to 300 W ⁶⁾	-	650 W	650 W ⁵⁾	650 W ⁵⁾
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	-	-	1000 VA	500 VA	-
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	-	600 VA ⁴⁾	500 VA	250 VA	-
Compact fluorescent lamps with EVG* and energy saving lamps	-	-	up to 400 W	-	-
Dimmable 230 V LED lamps	up to 300W 3)	-	up to 400 W	-	-
Service life at rated load, $\cos\phi$ = 1 or incandescent lamps 500 W at 100/h	-	>10 ⁵	>10 ⁵	>10 ⁵	>10 ⁵
Service life at rated load, $\cos \phi = 0.6$ at $100/h$	-	>4x10 ⁴	> 4x10 ⁴	> 4x10 ⁴	> 4x10 ⁴
Max. operating cyles	_	10³/h	10 ³ /h	10³/h	10 ³ /h
Connection type	Plug-in terminals	Plug-in terminals	Plug-in terminals	Plug-in terminals	Plug-in terminals
Minimum conductor cross-section	0.2 mm ²	0.2 mm ²	0.2 mm ²	0.2 mm ²	0.2 mm ²
Maximum conductor cross-section	1.5 mm ²	1.5 mm ²	1.5 mm ²	1.5 mm ²	1.5 mm ²
Conductor stripping	8-9 mm	8-9 mm	8-9 mm	8-9 mm	8-9 mm
Type of enclosure/terminals	IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20
Electronics					
Time on	100%	100%	100%	100%	100%
Max./min. temperature at mounting location	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C
Standby loss (active power)	0.6 W	0.5 W	0.5 W	0.5 W	0.5 W
Local control current at 230 V control input	0.4 mA	-	0.4 mA	0.4 mA	0.4 mA
Max. parallel capacitance (approx. length) of local control lead at 230 V AC	3 nF (10 m)	-	3 nF (10 m)	3 nF (10 m)	3 nF (10 m)

Powerline communication in the B/C-Band (5kb/s) corresponds to FCC, CENELEC EN 50065-1 and LONWORKS protocol

Applies to lamps of max. 150 W.

Also transformers electronically (C load).

Generally applies to 230 V LED lamps. Due to different lamp electronics, switch on/off problems and a restriction in the maximum number of lamps, however, the dimming ranges may be limited depending on the manufacturer; in particular when the connected load is very low (e.g. with 5 W LEDs). The comfort position LC1 at SAMDU optimizes the dimming range, which however results in a maximum capacity of only up to 150 W. In this comfort position, no wound (inductive) transformers should be dimmed.

Fluorescent lamps or LV halogen lamps with electronic ballast.

All actuators with 2 contacts: Inductive load cos φ = 0.6 as sum of both contacts 1000 W max.

A maximum of 2 transformers of the same type.

* EVG = electronic ballast units; KVG = conventional ballast units



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