POSEIDON®

WIRELESS CONTROL SYSTEM

| Control of lighting and shading |
Occupancy and light regulators |
RF sensors | Access systems |
BMS integration and visualisation |
Measurement of energy
consumption |

www.lightingautomation.eu

enika®

Poseidon® Wireless Control System

ENIKA.CZ is a manufacturer of installation electronics and control systems with its own internal R&D, testing and production facilities. We have over 30 years of experience in development and manufacturing of lighting and shading control systems for offices and administrative buildings, manufacturing halls, warehouses and logistics centers. Our building automation solution includes also wireless sensors and gateways for integration and for development of visual control. Our expertise in control systems and know-how of wireless radio technology is used to custom develop and deliver various OEM solutions for national and international customers – manufacturers of LED lighting, HVAC systems, sliding doors, wall mounted switches and window blinds.

The success of the company is based on our employees, their knowledge, expertise and motivation to introduce innovations and increase the value of developed solutions for our customers. High quality and an advanced infrastructure ensuring complete business processes and services for our customers, are another pillar of our successful development. Our aim is to be a responsible partner and flexible innovator, able to create efficient and effective user-oriented solutions.

Since 1990, ENIKA.CZ has been developing its dealership activities for a wide range of foreign manufacturers of lighting, industrial automation and electromechanical components. Our customer portfolio consists predominantly of the top electrical contractors and specialized wholesalers in the Czech and Slovak Republic.

Flexibility of our production and development capacities was significantly increased in 2012 when a new, advanced production and administrative center, with a total area exceeding 5,500 m^2, was opened. The new building uses the technologies developed by ENIKA.CZ - smart electrical installation including lighting, heating and window blinds control. The building provides a comfortable working environment for employees and generates significant savings in electricity consumption.

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- basic
- general-purpose
- exclusive

Poseidon® 868 MHz

Wireless sensors, lighting and shading control systems for the building automation

Control the world around you in a modern and effective way. Experience our solution for lighting control of your lighting systems in production halls, warehouses, logistic centers or at your offices. Enjoy the comfort and flexibility of control, increased safety and well-being of users and energy costs savings. Use Poseidon® wireless sensors and control system for lighting control and building automation.

Control the world around you in a modern and effective way.

Poseidon® is a user-friendly and energy-saving solution for wireless lighting control within building automation systems. It is designed so as to be compatible and integrable into the higher-level systems of building automation as much as possible.

Poseidon® can be operated with lighting systems composed of all common types of light fittings such as fluorescent, LED, halogen, incandescent, and discharge lamps.

Poseidon® is easy to extend, and can be used to control the lighting, for example, in one office, of a particular floor or even of the entire building. It brings energy costs savings which may, in certain cases, even exceed 70 %.

Poseidon® is environmentally friendly and offers investors an interesting solution for the certification of sustainable buildings acc. to LEED and BREEAM. The Poseidon® Asistent software allows comfortable configuration, remote administration and changes in lighting control depending on the requirements of users and owners of buildings.

Poseidon® 868 MHz
Wireless lighting and shading control system

Lighting control

TRANSMITTER – RECEIVER – SENSOR

Integration of the lighting control into the building automation system

TRANSMITTER – RECEIVER – SENSOR - INTERFACE TCP/IP

TRANSMITTERS

allow the user to control electronic systems. Pressing the respective pushbutton generates a command to be sent to the connected receiver that will subsequently perform the desired operation, e.g. it will turn on the light or close the louver. Commands from the transmitter are sent using proprietary wireless protocol Poseidon®.

- Easy to install
  using double-sided adhesive tape
- Range 150 m in open area
- Battery life 10 years
- Smart design
- Signalisation of the command received
- Easy to integrate into other systems

RECEIVERS

are connected to the power circuit of electronic systems and used for their direct on/off switching, dimming or controlling. The receivers receive commands from transmitters or sensors via the Poseidon® proprietary wireless protocol.

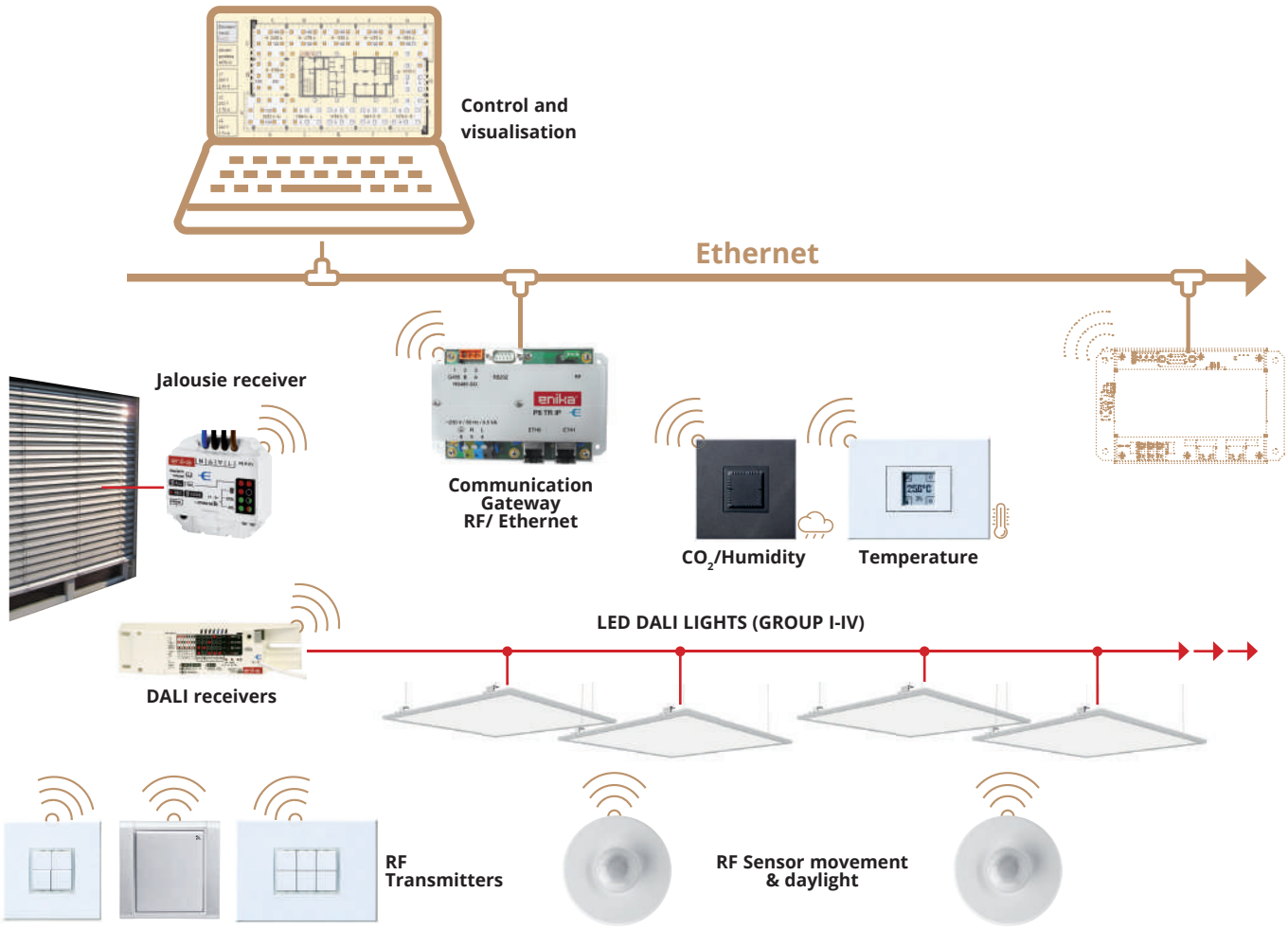
- Extended functionality
  using Poseidon® Asistent software
- Suitable for switching of all kinds of load
- It can be used as a signal repeater
- Easy to set
- Possibility of external antenna connection
- Compact dimensions

SENSORS

send the current information on the temperature, humidity, CO_2 concetration, lighting and presence of persons using proprietary wireless protocol Poseidon® to the higher-level system for further processing.

INTERFACE

is used for the communication between Poseidon® components and a building management system.



How does the system work?
A Poseidon® Office case study

The office is equipped with a lighting control consisting of a presence detector, a wall-mounted transmitter and receivers with DALI outputs. Each light fitting is controlled separately because of the requirement for subsequent simple changes in the interior layout.

A person entering the room switches the light on using either wall-mounted or mobile transmitters. The occupancy and light regulator will maintain the level of artificial lighting at a set level depending on the intensity of natural light. If nobody is present in the monitored area, the device will automatically switch off the lighting. This is to ensure that no light fitting is turned on unnecessarily.

Temperature transmitters provide the information on current temperatures in the office via Ethernet interface for measurement and control systems.

The roller shutter receiver can be controlled using a wall-mounted transmitter (either locally or centrally) or via Ethernet interface as required by the measurement and control system.

The control of interior lighting depending on the daylight intensity is the most advanced way of lighting control. In this way up to 70 % of energy needed for the operation of light fittings can be saved.

SYSTEM CONFIGURATION AND ADMINISTRATION

For convenient settings and making any changes, you can use the Poseidon® Asistent configuration software which communicates with all system components via Ethernet interface or universal USB transmitter.

Poseidon® transmitters

wall-mounted | mobile | I/O | analogue values

Wireless controllers are designed so as to meet the needs of users. Great emphasis is placed on ergonomics, mutual compatibility and ability to combine both shapes and colours of transmitters and frames. Building administrators, system integrators and electrical fitters will appreciate the ease of installation, flexible deployment in the interior and traditionally excellent technical parameters – long battery life and long signal range. Poseidon® transmitters present a reliable assistant to control the lighting, louvers and roller shutters, air-conditioning, heating, or access to the buildings.

P8 T _ MS, P8 T _ MR

Wall mounted 1-, 2-, 4- (1-, 3-, 6-) channel transmitter Poseidon®

easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

With its low profile and sleek modern design we are pleased to offer this new wall-mounted transmitter from the Maurito® series.

Power supply	3 V CR2450
Number of channels	1, 2 or 4 (1, 3 or 6)
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	60 g (85 g)
Operating frequency	868 MHz
Range	up to 150 m (open area)

03 white

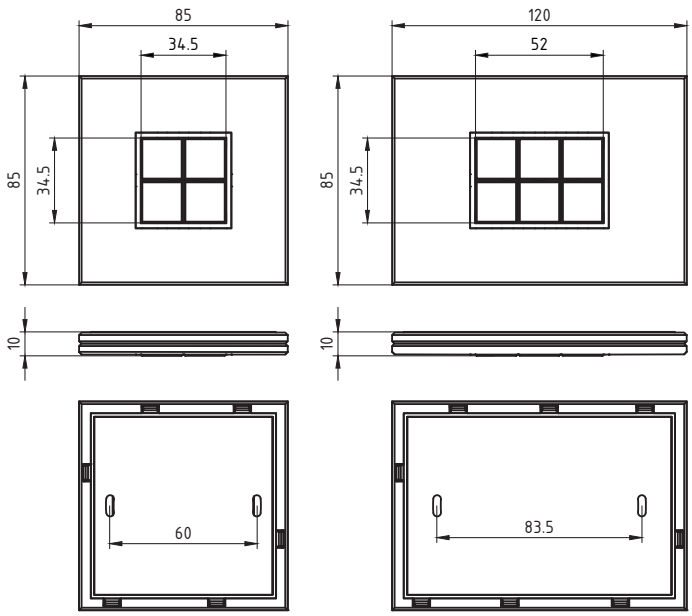
P8 T 1 MS 03

03 white

P8 T 2 MS 03

03 white

P8 T 4 MS 03



37 onyx

P8 T 1 MS 37

37 onyx

P8 T 2 MS 37

37 onyx

P8 T 4 MS 37

03 white

P8 T 1 MR 03

03 white

P8 T 3 MR 03

03 white

P8 T 6 MR 03

37 onyx

P8 T 1 MR 37

37 onyx

P8 T 3 MR 37

37 onyx

P8 T 6 MR 37

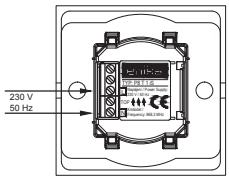
P8 T _ iS, P8 T _ iR

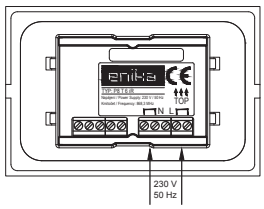
Wall mounted 1-, 2-, 4- (1-, 3-, 6-) channel transmitter Poseidon®

modern, minimalistic design | 230 V supply voltage | compatible with Poseidon® | range up to 150 m

A unique all-glass touch panel transmitter with illuminated buttons. It is an easy-to-use design transmitter with a modern, minimalistic and fresh look. It is designed for mounting into electrical installation box. I-glass transmitter is suitable for control of up to four appliances.

Power suply	230 V 50 Hz
Number of channels	1, 2, 3, 4 or 6
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to + 55 °C
Weight	180 g (iR), 120 g (iS)
Operating frequency	868 MHz
Range	up to 150 m (open area)
Operating frequency	868 MHz
Range	up to 150 m (open area)





P8 T 1 iS

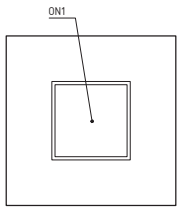
P8 T 2 iS

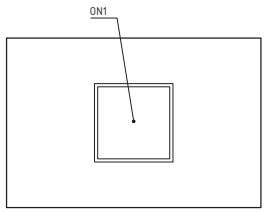
P8 T 4 iS

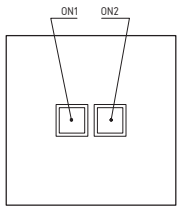
P8 T 1 iR

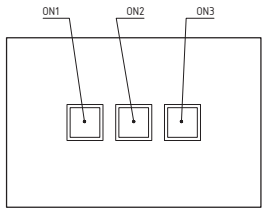
P8 T 3 iR

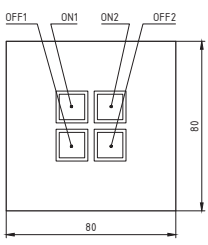
P8 T 6 iR

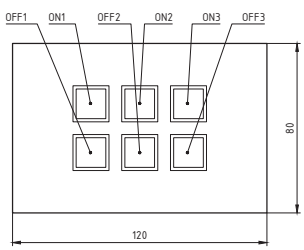












P8 T 2 Time, P8 T 2 Time Arbo

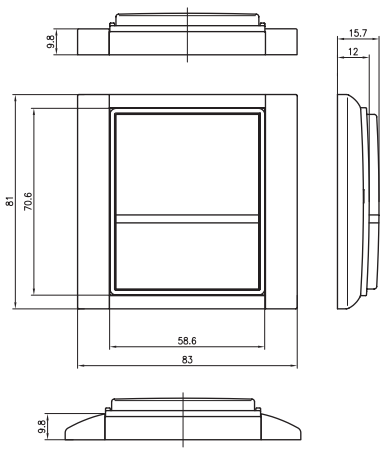
2-channel wall-mounted transmitter Poseidon®

easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

The main advantage of Time, Time Arbo transmitters is their design. The colour designs and possible combinations with wood-effect frames give them an exclusive appearance, so they will became a luxurious complement to any office. They are designed to control two appliances. The design of the Element transmitter brings an elegant look to any interior. Thanks to the frame design with rounded edges, a high level of user friendliness is ensured – you will find the transmitter easily, just "by touch".

For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

Power supply	3 V CR2430
Number of channels	2
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	60 g
Operating frequency	868 MHz
Range	up to 150 m (open area)

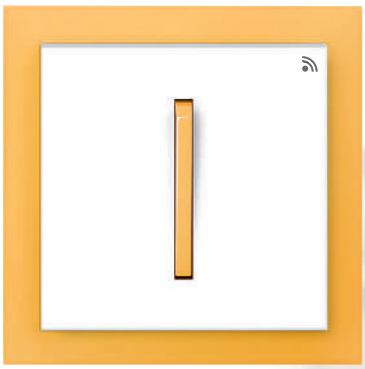


time

03	01	08	32	33	34
white – white	white – ice white	titanium	old-silver	champagne	anthracite
P8 T2 Time 03 3901F-A00110 03	P8 T2 Time 01 3901F-A00110 01	P8 T2 Time 08 3901F-A00110 08	P8 T2 Time 32 3901F-A00110 32	P8 T2 Time 33 3901F-A00110 33	P8 T2 Time 34 3901F-A00110 34

ARBO

50	51	52	08	53
old-silver – beech	old-silver – alder	old-silver – cherry	titanium – cherry	anthracite – mahog-any
P8 T2 Time 32 3901F-A50110 50	P8 T2 Time 32 3901F-A50110 51	P8 T2 Time 32 3901F-A50110 52	P8 T2 Time 08 3901F-A50110 52	P8 T2 Time 34 3901F-A50110 53



P8 T 2 Neo

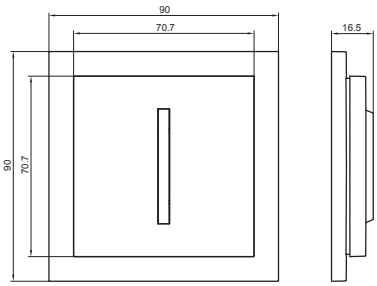
2-channel wall-mounted transmitter Poseidon®

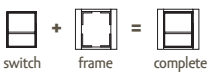
easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

The unusual appearance of Neo transmitter combines retro design elements with emphasis placed on its function in a modern interior where the accent is kept on originality and non-traditional solutions. Suitable for control of two appliances.

For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

Power supply	3 V CR2430
Number of channels	2
Protection	IP20 acc. to EN 60529
Operating temperature	–20 to +55 °C
Weight	50 g
Operating frequency	868 MHz
Range	up to 150 m (open area)





01 white – ice white

P8 T2 Neo 01
3901M-A00110 01

44 white/ice gray

P8 T2 Neo 44
3901M-A00110 44

61 graphite/ice white

P8 T2 Neo 61
3901M-A00110 01

43 white/ice orange

P8 T2 Neo 43
3901M-A00110 43

41 white/ice blue

P8 T2 Neo 41
3901M-A00110 41

42 white/ice green

P8 T2 Neo 42
3901M-A00110 42

71 steel/teracotta

P8 T2 Neo 71
3901M-A00110 35

72 titanium/onyx

P8 T2 Neo 72
3901M-A00110 08

73 steel/titanium

P8 T2 Neo 73
3901M-A00110 36

74 onyx/titanium

P8 T2 Neo 74
3901M-A00110 37

P8 T 2 Levit

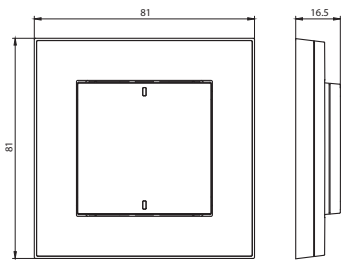
2-channel wall-mounted transmitter Poseidon®

easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

A completely new design range that features an interesting appearance and is available in many colour hues. It can be used separately or in multiple frames and in any colour combinations. It is designed to control up to two appliances.

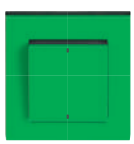
For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

Power supply	3 V CR2430
Number of channels	2
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	60 g
Operating frequency	868 MHz
Range	up to 150 m (open area)



switch + frame = complete transmitter

01	03	16	17	18
white / ice white	white/white	gray/white	ivory/white	macchiato/white
P8 T4 Levit 01 3901H-A05010 01	P8 T4 Levit 03 3901H-A05010 03	P8 T4 Levit 16 3901H-A05010 16	P8 T4 Levit 17 3901H-A05010 17	P8 T4 Levit 18 3901H-A05010 18

62	63	64	65	66	67
white/smoke-black	onyx/smoke-black	yellow/smoke-black	red/smoke-black	orange/smoke-black	green/smoke-black
					
P8 T4 Levit 62 3901H-A05010 62	P8 T4 Levit 63 3901H-A05010 63	P8 T4 Levit 64 3901H-A05010 64	P8 T4 Levit 65 3901H-A05010 65	P8 T4 Levit 66 3901H-A05010 66	P8 T4 Levit 67 3901H-A05010 67

P8 T 4 Time, P8 T 4 Time Arbo

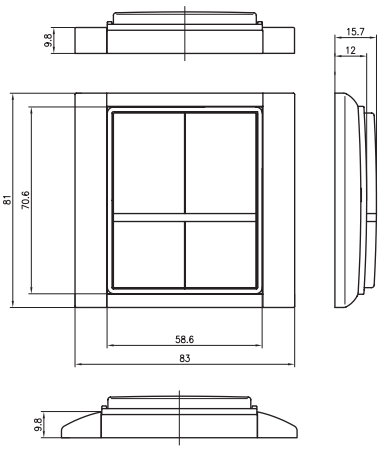
4-channel wall-mounted transmitter Poseidon®

easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

The main advantage of Time, Time Arbo transmitters is their design. The colour designs and possible combinations with wood-effect frames give them an exclusive appearance, so they will became a luxurious complement to any office. It is designed to control up to four appliances. The design of the Element transmitter brings an elegant look to any interior. Thanks to the frame design with rounded edges, a high level of user friendliness is ensured – you will find the transmitter easily, just "by touch".

For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

Power supply	3 V CR2430
Number of channels	4
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	60 g
Operating frequency	868 MHz
Range	up to 150 m (open area)



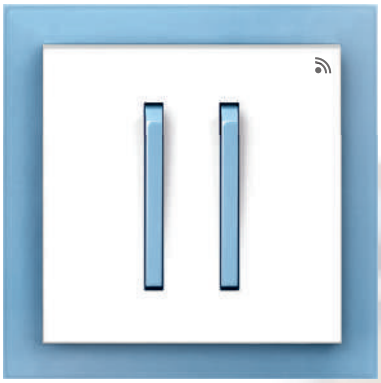
switch + frame = complete transmitter

time

03 white / white	01 graphite / ice white	08 titanium	32 old-silver	33 champagne	34 anthracite
P8 T4 Time 03 3901F-A00110 03	P8 T4 Time 01 3901F-A00110 01	P8 T4 Time 08 3901F-A00110 08	P8 T4 Time 32 3901F-A00110 32	P8 T4 Time 33 3901F-A00110 33	P8 T4 Time 34 3901F-A00110 34

ARBO

50 old silver / beech	51 old silver / alder	52 old silver / cherry	08 titanium / cherry	53 anthracite / mahogany
P8 T4 Time 32 3901F-A50110 50	P8 T4 Time 32 3901F-A50110 51	P8 T4 Time 32 3901F-A50110 52	P8 T4 Time 08 3901F-A50110 52	P8 T4 Time 34 3901F-A50110 53



P8 T 4 Neo

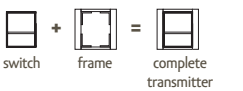
4-channel wall-mounted transmitter Poseidon®

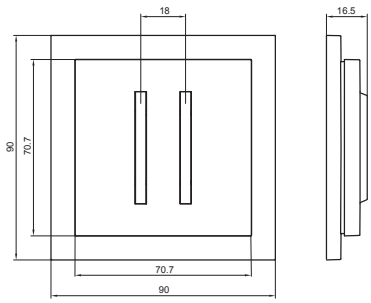
easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

The unusual appearance of the Neo transmitter combines retro design elements with emphasis placed on its function in a modern interior where the accent is kept on originality and non-traditional solutions. Suitable to control up to four appliances.

For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

Power supply	3 V CR2430
Number of channels	4
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	50 g
Operating frequency	868 MHz
Range	up to 150 m (open area)





01 white / ice white

P8 T4 Neo 01
3901M-A00110 01

44 white/ice gray

P8 T4 Neo 44
3901M-A00110 44

61 graphite/ice white

P8 T4 Neo 61
3901M-A00110 01

43 white/ice orange

P8 T4 Neo 43
3901M-A00110 43

41 white/ice blue

P8 T4 Neo 41
3901M-A00110 41

42 white/ice green

P8 T4 Neo 42
3901M-A00110 42

71 steel/teracotta

P8 T4 Neo 71
3901M-A00110 35

72 titanium/onyx

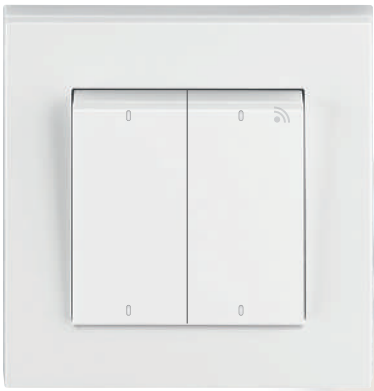
P8 T4 Neo 72
3901M-A00110 08

73 steel/titanium

P8 T4 Neo 73
3901M-A00110 36

74 onyx/titanium

P8 T4 Neo 74
3901M-A00110 37



P8 T 4 Levit

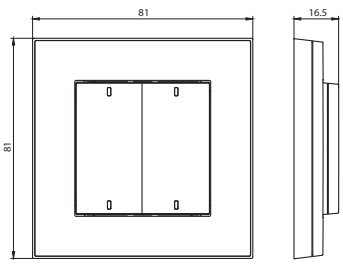
4-channel wall-mounted transmitter Poseidon®

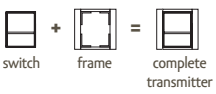
easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

A completely new design range that features an interesting appearance and is available in many colour hues. It can be used separately or in multiple frames and in any colour combinations. It is designed to control up to four appliances.

For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

Power supply	3 V CR2430
Number of channels	4
Protection	IP20 acc. to EN 60529
Operating temperature	–20 to +55 °C
Weight	60 g
Operating frequency	868 MHz
Range	up to 150 m (open area)





01 white / ice white

P8 T4 Levit 01
3901H-A05010 01

03 white/white

P8 T4 Levit 03
3901H-A05010 03

16 gray/white

P8 T4 Levit 16
3901H-A05010 16

17 ivory/white

P8 T4 Levit 17
3901H-A05010 17

18 macchiato/white

P8 T4 Levit 18
3901H-A05010 18

62 white/smoke-black

P8 T4 Levit 62
3901H-A05010 62

63 onyx/smoke-black

P8 T4 Levit 63
3901H-A05010 63

64 yellow/smoke-black

P8 T4 Levit 64
3901H-A05010 64

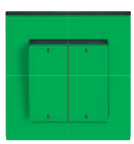
65 red/smoke-black

P8 T4 Levit 65
3901H-A05010 65

66 orange/smoke-black

P8 T4 Levit 66
3901H-A05010 66

67 green/smoke-black



P8 T4 Levit 67
3901H-A05010 67

P8 T 4 NS, P8 T 8 NS Neo

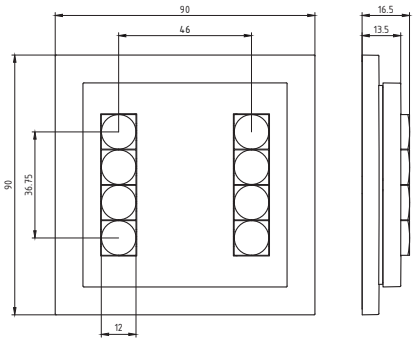
4-, 8- channel wall-mounted transmitter Poseidon®

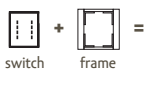
easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

Simple universal design of wall-mounted transmitter with a central area for custom printing. It can be used for controlling of up to eight appliances. The transmitter can be fixed on the electrical installation box or on any place by the double side adhesive tape.

For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

	P8 T 4 NS	P8 T 8 NS
Power supply	3 V CR2430	
Number of channels	4	8
Protection	IP 20 acc to EN 60529	
Operating temperature	-20 to +55 °C	
Weight	75 g	
Operating frequency	868 MHz	
Range	up to 150 m (open area)	





01
white – ice white

74
onyx/titanium

P8 T4 NS 01
3901M-A00110 01

P8 T4 NS 74
3901M-A00110 37

01
white – ice white

74
onyx/titanium

P8 T8 NS 01
3901M-A00110 01

P8 T8 NS 74
3901M-A00110 37

P8 T 4 Tango

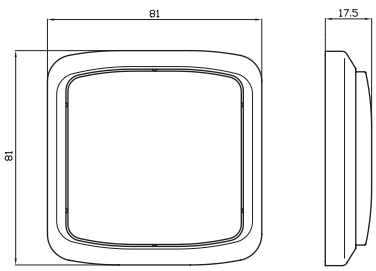
4-channel wall-mounted transmitter Poseidon®

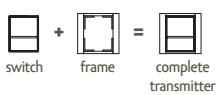
easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

A classic design. Tango combines the very best features, i.e. design tried and tested by generations, excellent ergonomics, and a variety of features. Thanks to these characteristics and classic colours, it will easily become an integral part of any interior. Suitable for control of up to four appliances.

For these available designs of wall-transmitters, we offer a complete range of installation devices, including sockets, coomunication socket and other accessories.

Power supply	3 V CR2450
Number of channels	4
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	60 g
Operating frequency	868 MHz
Range	up to 150 m (open area)





B	C	D	S	R2	H	S2	N
white	ivory	beige	gray	heather red	brown	smoke-gray	black

P8 T4 Tango B 3901A-B10 B	P8 T4 Tango C 3901A-B10 C	P8 T4 Tango D 3901A-B10 D	P8 T4 Tango 3901A-B10 S	P8 T4 Tango R2 3901A-B10 R2	P8 T4 Tango H 3901A-B10 H	P8 T4 Tango S2 3901A-B10 S2	P8 T4 Tango N 3901A-B10 N

P8 T 1 Disc, P8 T 1 Uni

1-channel mobile transmitter Poseidon®

range up to 150 m | compatible with Poseidon® | battery life 10 years

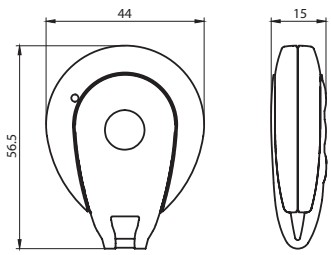
P8 T 1 Disc

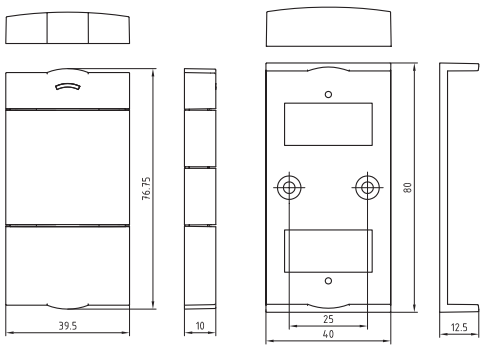
The Disc transmitter is well suited for use under demanding conditions; it is equipped with an IP65 case. The transmitter is protected from dust, spraying water and mechanical damage. So it will become a useful device during movement outdoors or wherever a higher resilience is required.

P8 T 1 Uni

As dynamic as your world. Thanks to its wall-mounted holder, the UNI transmitter has its firm place in interiors; but you can remove it at any time and start using it as a mobile controller. By doing so you get a versatile device with smart appearance that combines the very best of wall-mounted and portable controllers.

	P8 T 1 Disc	P8 T 1 Uni
Power supply	3 V CR1632	3 V CR2430
Number of channels	1	
Protection	IP65	IP20
Operating temperature	–20 to +55 °C	
Weight	16 g	24 g
Operating frequency	868 MHz	
Range	up to 150 m (open area)	





P8 T 1 Disc

P8 T 1 UNI

P8 T 2 Alien, P8 T 2 Disc, P8 T 2 Uni, P8 T 2 Key

2-channel mobile transmitter Poseidon®

range up to 150 m | compatible with Poseidon® | battery life 10 years

P8 T 2 Alien, P8 T 2 Key

Stylish transmitters with an unusual appearance for those who go their own way. The case featuring an ergonomic design without sharp edges does not obstruct at all, e.g. in your pocket, and is specifically adapted so as to be put on a keyring.

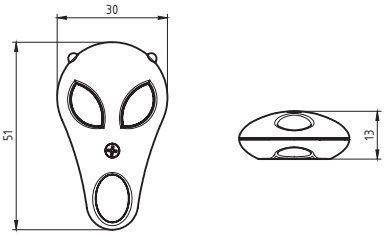
P8 T 2 Disc

The Disc transmitter is well suited for use under demanding conditions; it is equipped with an IP65 case. The transmitter is protected from dust, spraying water and mechanical damage. So, it will become a useful device during the movement outdoors or wherever a higher resistance is required.

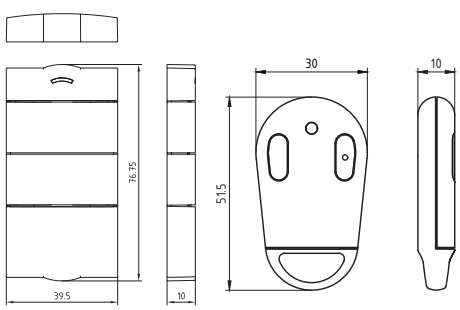
P8 T 2 Uni

As dynamic as your world. Thanks to its wall-mounted holder, the UNI transmitter has its firm place in interiors; but you can remove it any time and start using it as a mobile controller. By doing so, you get a versatile device with smart appearance that combines the very best of wall-mounted and portable controllers.

	P8 T2 Alien P8 T 2 Key	P8 T2 Disc	P8 T 2 Uni
Power supply	3 V CR1632		3 V CR2430
Number of channels	2		
Protection	IP20	IP65	IP20
Operating temperature	-20 to +55 °C		
Weight	10 g	16 g	24 g
Operating frequency	868 MHz		
Range	up to 150 m (open area)		



P8 T 2 Alien P8 T 2 Key P8 T 2 Disc P8 T 2 UNI



P8 T 3 Disc, P8 T 3 Uni

3-channel mobile transmitter Poseidon®

range up to 150 m | compatible with Poseidon® | battery life 10 years

P8 T 3 Disc

The Disc transmitter is well suited for use under demanding conditions; it is equipped with an IP65 case. The transmitter is protected from dust, spraying water and mechanical damage. So it will become a useful device during movement outdoors or wherever a higher resilience is required.

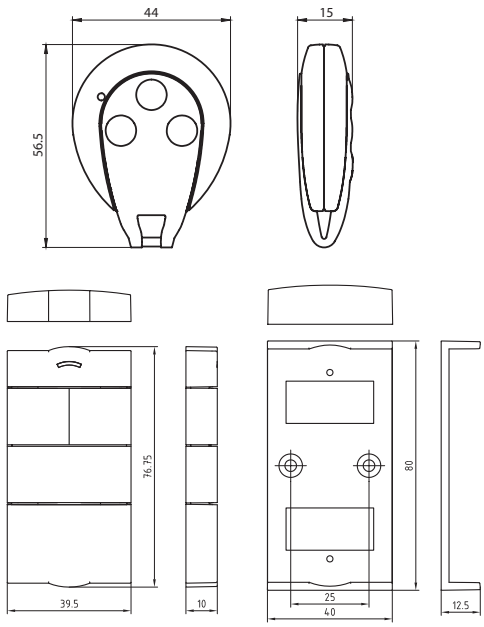
P8 T 3 Uni

As dynamic as your world. Thanks to its wall-mounted holder, the UNI transmitter has its firm place in interiors; but you can remove it at any time and start using it as a mobile controller. By doing so you get a versatile device with smart appearance that combines the very best of wall-mounted and portable controllers.

	P8 T 3 Disc	P8 T 3 Uni
Power supply	3 V CR1632	3 V CR2430
Number of channels	3	
Protection	IP65	IP20
Operating temperature	–20 to +55 °C	
Weight	16 g	24 g
Operating frequency	868 MHz	
Range	up to 150 m (open area)	

P8 T 3 Disc

P8 T 3 UNI



P8 T 4 Cross, P8 T 4a Cobra, P8 T 4 Disc, P8 T 4 Uni

Mobile 4-channel transmitter Poseidon®

range up to 150 m | compatible with Poseidon® | battery life 10 years

P8 T 4 Cross

Minimum size for maximum number of functions. Control 4 separate circuits intuitively, with one finger using the cross button. You will appreciate in particular the compact dimensions, possibility of having it hung on the keyring, and rounded edges. Ideally suited for carrying in a pocket and controlling of garage doors, gates and other access systems.

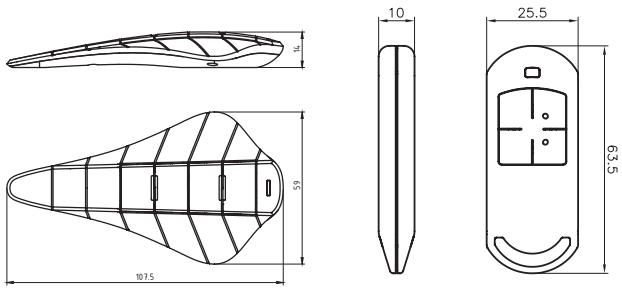
P8 T 4a Cobra

Be enchanted by its unique design. Cobra will ensure control of up to 4 different circuits. Control the outdoor or indoor lighting or louvers. Control the world around you in a stylish and confident way. The mobile transmitter Cobra is equipped with a visual confirmation of the receipt of the command sent.

P8 T 4 Disc

P8 T 4 Uni

	P8 T4 Cross	P8 T4 Disc	P8 T 4 Uni	P8 T 4 Cobra
Power supply	3 V CR1632		3 V CR2430	3 V CR2450
Number of channels	4			
Protection	IP20	IP65	IP20	
Operating temperature	-20 to +55 °C			
Weight	10 g	16 g	24 g	
Operating frequency	868 MHz			
Range	up to 150 m (open area)			



75
onyx / steel

76
steel / onyx

77
copper / champagne

P8 T 4 Cross

P8 T4a Cobra 75

P8 T4a Cobra 76

P8 T4a Cobra 77

P8 T 4 Disc

P8 T 4 UNI

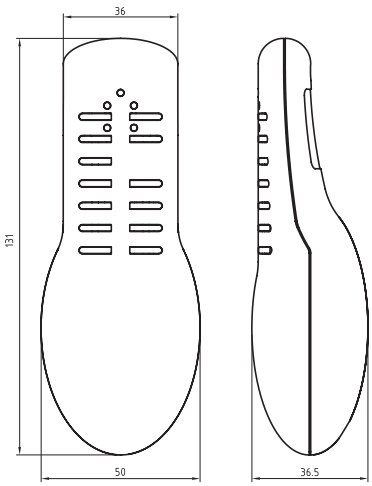
P8 T 4 × 8a

Multiple channel mobile transmitter Poseidon®

signalisation of commands received | range up to 150 m | compatible with Poseidon® | battery life 10 years

The greatest number of functions in one controller. Thanks to the controller divided into eight control channels in four groups, you can keep control over a larger number of electrical appliances. Thanks to the ergonomic design, it fits perfectly in your hand.

Power supply	3V CR2450 lithium
Number of channels	16 (ON-OFF + CENTRAL OFF)
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	50 g
Operating frequency	868 MHz
Range	up to 150 m (open area)



c ivory

P8 T 4x8a C

33 champagne

P8 T 4x8a 33

35 terracotta

P8 T 4x8a 35

S dark gray

P8 T 4x8a S

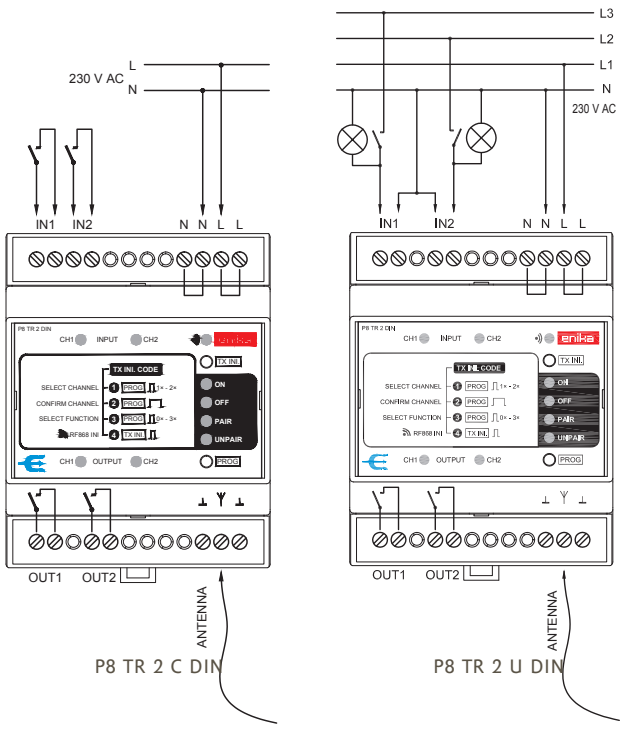
P8 TR 2C DIN, P8 TR 2U DIN

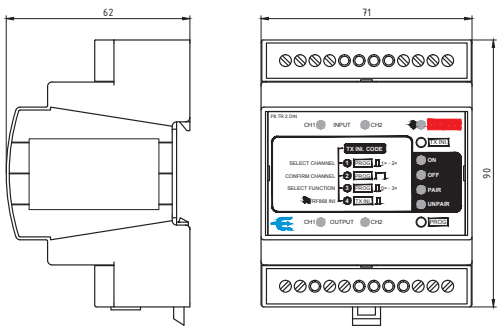
2-channel transmitter of input information Poseidon®

easy to install | range up to 150 m | DIN rail | signal receipt confirmation | external antennas

It offers a completely unique solution for transmitting the input information (e.g. ripple control signal). In practical terms it is a receiver and transmitter all-in-one. If an input is closed on the transmitting side, this information will be sent, and the other device on the receiving side will evaluate it and close the respective output. Two-way communication between both the devices is ensured, which provides a maximum transmission reliability. This feature allows, among other things, a feedback signalling of the state of the equipment being controlled. When the transmitter signal is lost, it is possible to define the output state on the receiving side. This will ensure the maximum reliability of connection, e.g. in the applications such as monitoring the maximum value, control of pumps in waterworks, etc.

	P8 TR 2C DIN P8 TR 2U DIN	P8 TR 2C DIN>24V
Power supply	230 V ±10 % 50 Hz	24 V~= ±20 %
Inputs: P8 TR 2C DIN		
Loop current	max. 5 mA	
Open loop voltage	12 V	
Circuit impedance for - "NC" state - "NO" state	 max. 1 kΩ min. 5 kΩ	
P8 TR 2U DIN		
Input voltage range for - "NC" state - "NO" state	 180 to 250 V, 50 Hz 0 to 30 V, 50 Hz	
Input impedance:	48 kΩ	
Maximum switching power	250 V 50 Hz	
	750 W for conventional bulbs	
	500 VA for halogen bulbs with transformer	
	350 VA for uncorrected fluorescent lamps	
Switching elements	relay	
insulation distance between terminals		
N+L<>ANT<>IN1+IN2 <>OUT1+OUT2	min. 6.5 mm (P8 TR 2C DIN)	
N+L<>ANT<>IN1<>IN2 <>OUT1+OUT2	min. 6.5 mm (P8 TR 2U DIN)	
OUT1<>OUT2	min. 3 mm	
Protection	IP20 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
Dimensions	4 M	
Weight	100 g	
Connection terminals	screw-type, max. 2.5 mm^2	
Receiver operating frequency	868 MHz	
Range	up to 150 m (open area)	





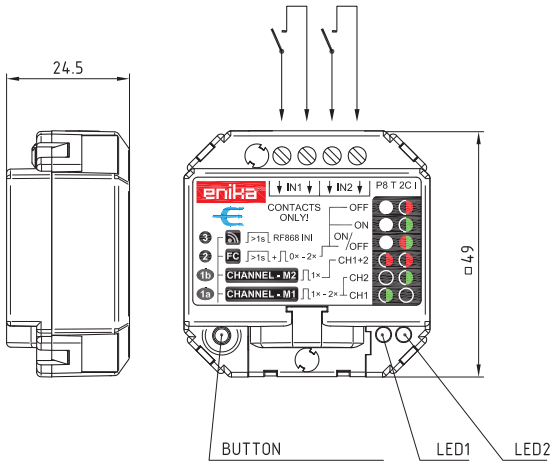
P8 T 2C I

Universal built-in transmitter Poseidon®

easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

The battery powered universal built-in transmitter is designed for installation in a junction box. It is available in a dual-channel design. You can change your existing switch to a wireless one very easily. Alternatively, it can be used to transmit the information on the state of a sensor, pushbutton, etc. without an external power supply.

Power supply	3 V CR2032 lithium
Number of channels	2
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	50 g including battery
Operating frequency	868 MHz
Range	up to 150 m (open area)



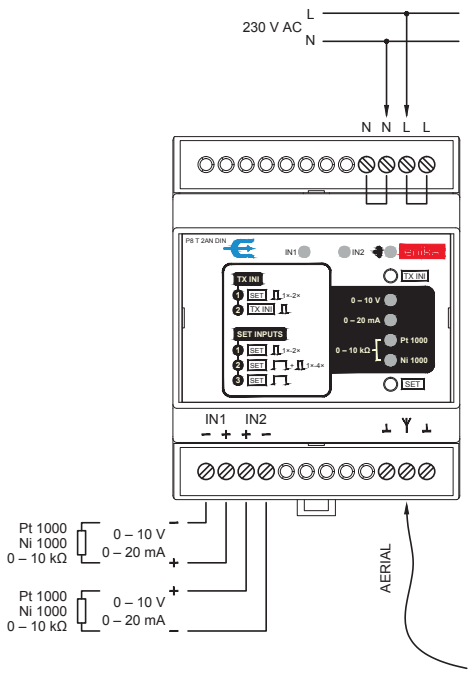
P8 T 2AN DIN

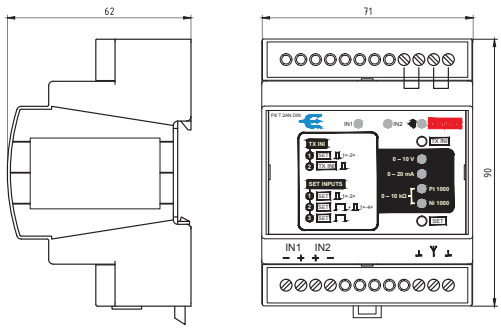
2-channel transmitter of analogue values Poseidon®

easy to set up | DIN rail mounted | possibility to connect external antenna

It is designed for a DIN rail mounting. When connected with a suitable receiver it is used for a wireless transmission of information on the size of the analogue values of the connected voltage or current source or resistance temperature detectors (RTD). The analogue values can be also transmitted in conversion to the 0 - 100 % range, or as the output of the comparator in the ON/OFF format.

	P8 T 2AN DIN	P8 T 2AN DIN>24V
Power supply	230 V ±10 % 50 Hz	24 V~= ±20 %
Preset input range	0 – 10 V	
input resistance	20 kΩ	
Preset input range	0 – 20 mA	
input resistance	100 Ω	
Preset input range	0 – 10 kΩ	
measuring current	max. 1 mA	
Preset input ranges	Pt 1000 (Tk 3850)	
range of measurement	-50 to +250 °C	
User-defined ranges	Nt 1000 (Tk 6180)	
range of measurement	-50 to +150 °C	
Insulation distances between terminals N+L<> IN1+IN2	min. 6.5 mm	
Protection	IP20 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
External dimensions	90 × 71 × 58 mm	
Weight	100 g	
Connection terminals	screw-type, max. 2.5 mm²	
Operating frequency	868 MHz	
Signal range with the supplied antenna	150 m (open area)	





P8 T Keyboard

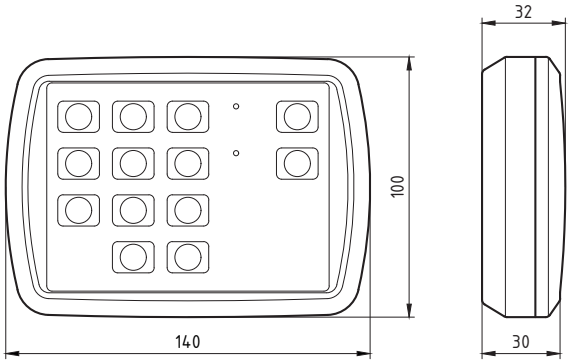
Transmitting keyboard Poseidon®

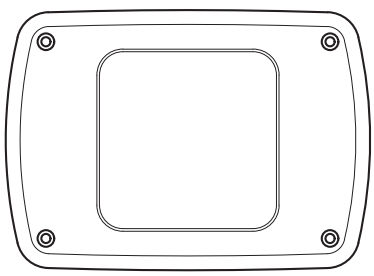
high ingress protection IP65 | up to 10 000 transmitting channels | range up to 150 m | battery life more than 10 years

The Keyboard is used to control Poseidon® receivers.

The keyboard is possible to lay or to stick on a suitable area. Thanks to the power supply from a battery it can be used as a mobile transmitter. The keyboard can work in a direct transmission mode (single button) or as a transmitter of numerical codes (multi button).

Power supply	2× 1,5 V, lithium AA
Number of channels	13 (single button mode), 0 – 9999 (multi button mode)
Protection	IP65 acc. to EN 60 529
Operating temperature	-20 to +55 °C
Weight	200 g
Operating frequency	868 MHz
Range	up to 150 m (open area)





P8 T Keyboard

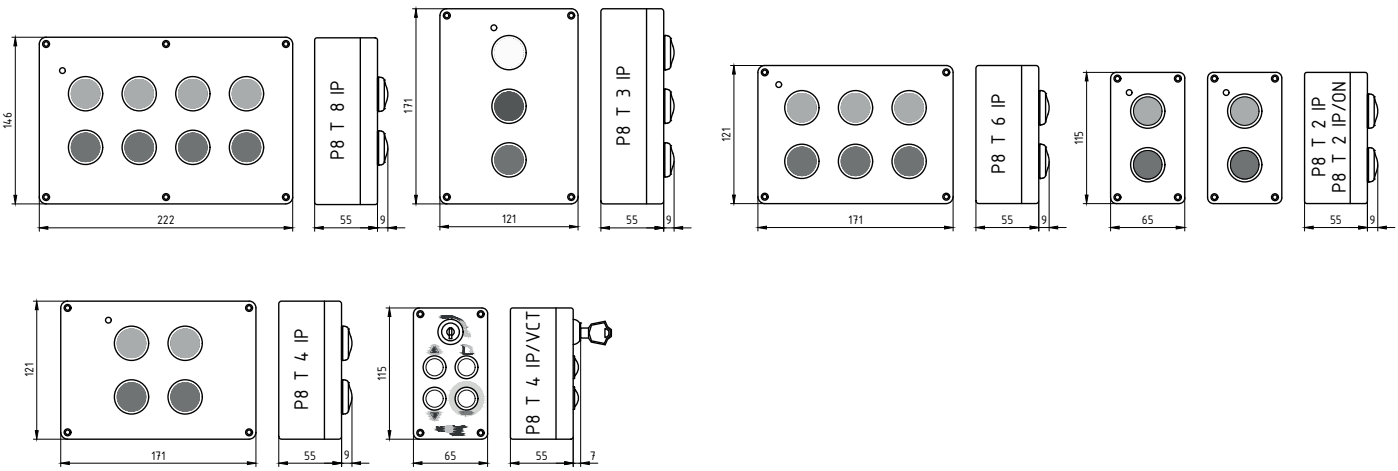
P8 T _ IP

2, 3, 4, 6, 8-channel mobile transmitter Poseidon®

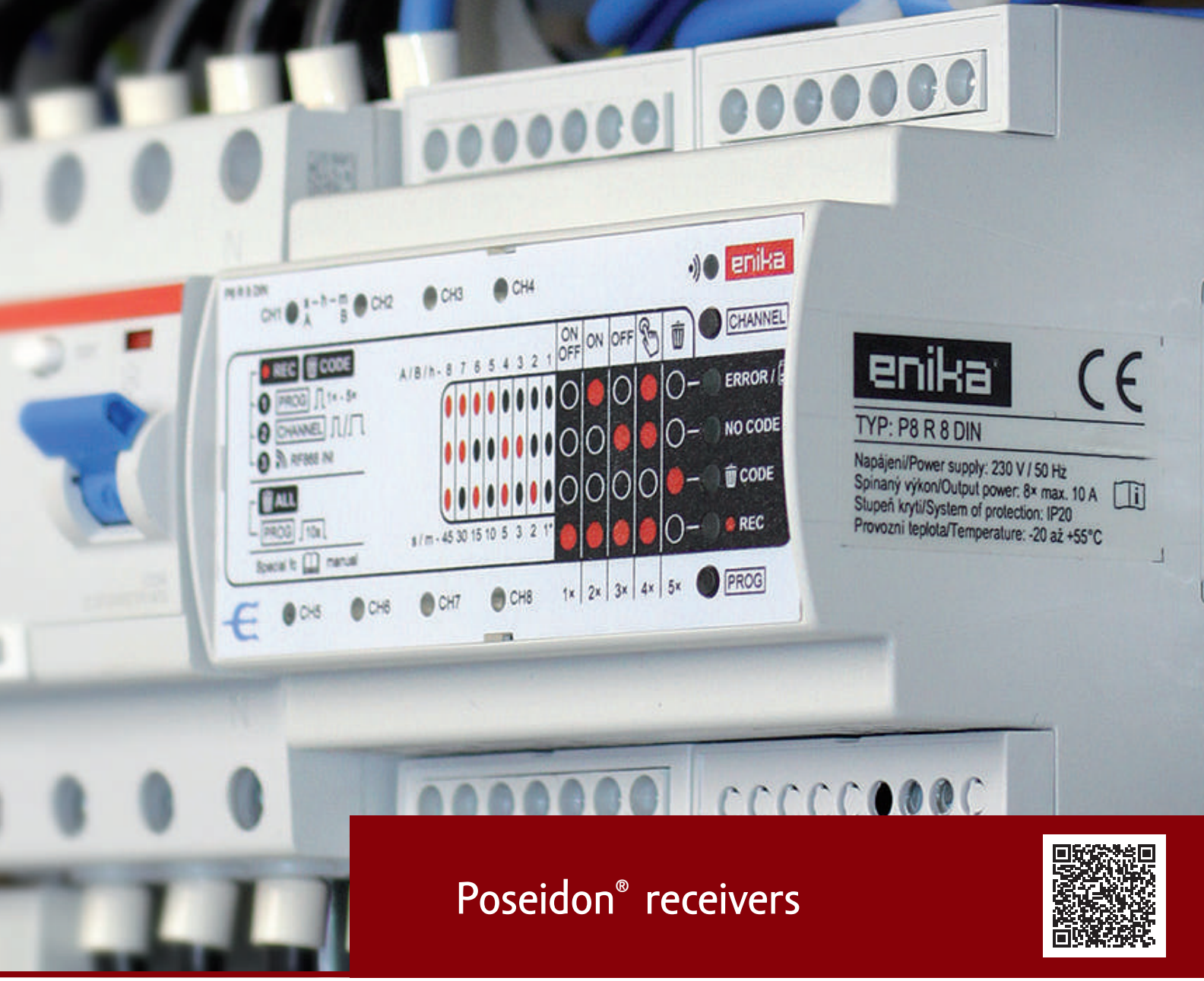
large buttons | battery life 10 years | compatible with Poseidon® | range up to 150 m

The transmitter is designed to provide comfortable and reliable control in demanding, especially industrial environments. The large buttons can be easily operated even while wearing protective gloves. The IP65 box provides excellent mechanical protection against dust, water and dirt.

Power supply	3 V CR2450 lithium
Number of channels	2, 3, 4, 6, 8
Protection	IP65 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	190, 350, 370, 540 g
Operating frequency	868 MHz
Range	150 m (open area)



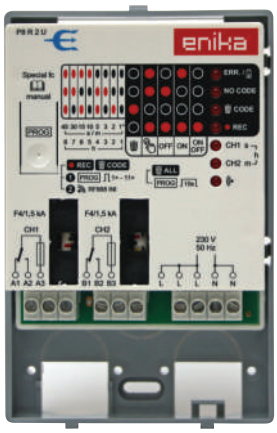
P8 T 2 IP | P8 T 3 IP | P8 T 4 IP | P8 T 6 IP | P8 T 8 IP



Poseidon® receivers

relay | jalousie | analogue | DALI

Poseidon® receivers represent actuating units (actuators) of the wiring system that are connected to the power circuit and directly control the connected light fitting, louver motor or other electrical systems. The receivers are controlled by transmitters and sensors. In order to communicate one to another, they use the proprietary communication protocol at a frequency of 868 MHz which is characterised by high speed of message transmission and high level of security. The Poseidon® receivers offer standard functions, i.e. ON, OFF, ON/OFF, dimming 1-10 V/0-10 V and DALI, control using timers and time tags, and fine positioning of louver slats, as well.



ON | OFF | ON/OFF | | | /OFF | RETR |

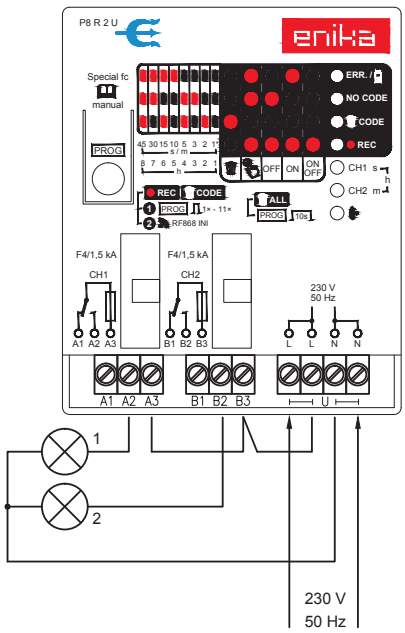
P8 R 2 U

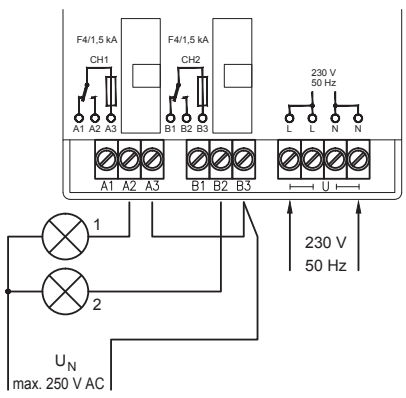
2-channel universal surface mounted receiver Poseidon®

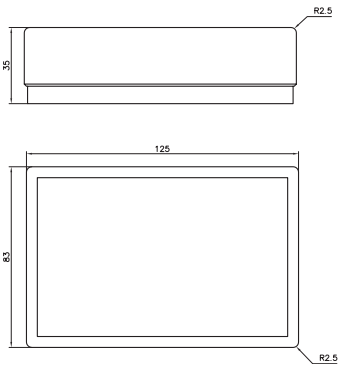
easy to set | suitable for switching of all kinds of load | easy to set | RF signal repeater

It is designed for mounting on the wall onto a standard junction box (KU68). It is used to control of two independent circuits using a relay with changeover contacts. In addition to normal functions (ON, OFF, Timer, Push), it can also be used as a signal repeater.

	P8 R 2 U	P8 R 2 U>24V
Power supply	230 V ±10 % 50 Hz	24 V= ±20 %
Max. switching power	750 W (Incandescent lamps, halogen lamps)	
	500 VA (Inductive loads, eletronic ballasts	
	350 VA / 64 µF (Fluorescent tubes)	
	300 W (compact fluorescent lamps, compact LED lamps)*	
Switching elements	relay with changeover contacts	
Number of channels	2	
Protection	IP20 acc. to EN 60529	
Operating temperature	–20 to +55 °C	
Output protection	F 4/1500 A 250 V	
Connection terminals	screw-type, max. 2.5 mm^2	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 150 m (open area)	
Maximum number of codes stored in the memory	32	







ON | OFF | ON/OFF | | | /OFF | RETR |

P8 R 2 DIN

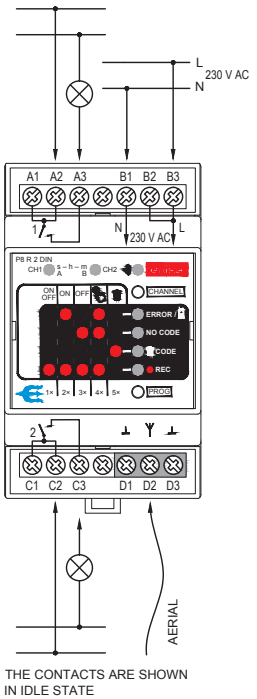
2-channel universal receiver Poseidon®

easy to setup | control by a large number of transmitters | external antenna connection | RF signal repeater

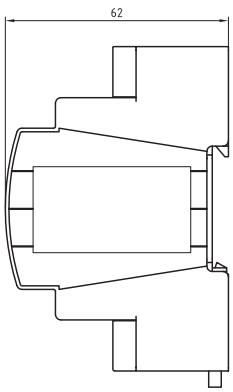
A module-type receiver for easy installation in switchboards with two output channels. In addition to conventional functions, it can also be used as a signal repeater. So, it is well suited when a request to extend the number of control circuits occurs or wherever the propagation of RF signals is a problem.

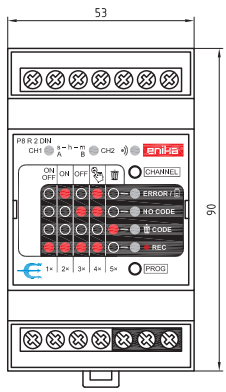
For more complicated installations, it can be configured using the configuration software the Poseidon® Asistent.

	P8 R 2 DIN	P8 R 2 DIN>24V
Power supply	230 V ±10 % 50 Hz	24 V~= ±20 %
Max. switching power	2300 W (Incandescent lamps, halogen lamps)	
	1750 VA (Inductive loads, eletronic ballasts	
	500 VA / 64 µF (Fluorescent tubes)	
	400 W (compact fluorescent lamps, compact LED lamps)*	
Number of channels	2	
Protection	IP20 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
Output protection	external (max. 16 A) per group of contacts	
Dimensions	3 M	
Weight	100 g	
Terminal blocks	screw-type, max. 4 mm²	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 300 m (open area)	
Maximum number of codes stored in the memory	32	



THE CONTACTS ARE SHOWN IN IDLE STATE





ON | OFF | ON/OFF | | | /OFF | RETR |

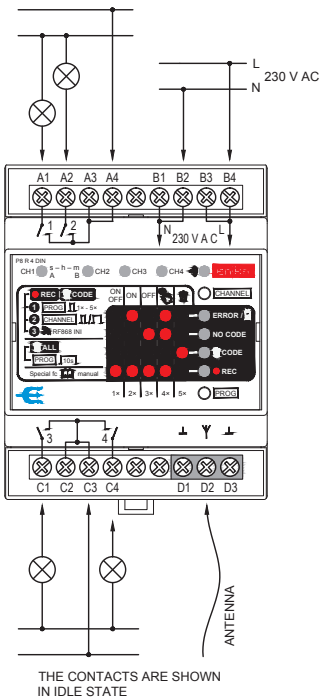
P8 R 4 DIN

4-channel universal receiver Poseidon®

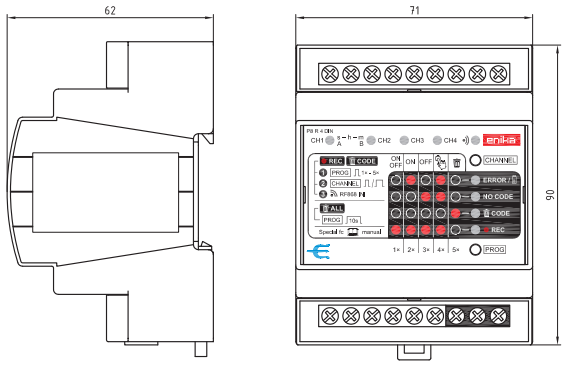
easy to setup | suitable for switching of all kinds of load | external antenna connection | RF signal repeater

A module-type receiver for easy installation in switchboards with four output channels. In addition to conventional functions, it can also be used as a signal repeater. So it is well suited when a request to extend the number of control circuits occurs or wherever the propagation of RF signals is a problem.

	P8 R 4 DIN	P8 R 4 DIN>24V
Power supply	230 V ±10 % 50 Hz	24 V~= ±20 %
Max. switching power	2300 W (Incandescent lamps, halogen lamps)	
	1750 VA (Inductive loads, eletronic ballasts	
	500 VA / 64 µF (Fluorescent tubes)	
	400 W (compact fluorescent lamps, compact LED lamps)*	
Number of channels	4	
Protection	IP20 acc. to EN 60529	
Operating temperature	–20 to +55 °C	
Output protection	external (max. 16 A) per group of contacts	
Dimensions	4 M	
Weight	270 g	
Terminal blocks	screw-type, max. 4 mm^2	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 300 m (open area)	
Maximum number of codes stored in the memory	32	



THE CONTACTS ARE SHOWN IN IDLE STATE



ON | OFF | ON/OFF | | | /OFF | RETR |

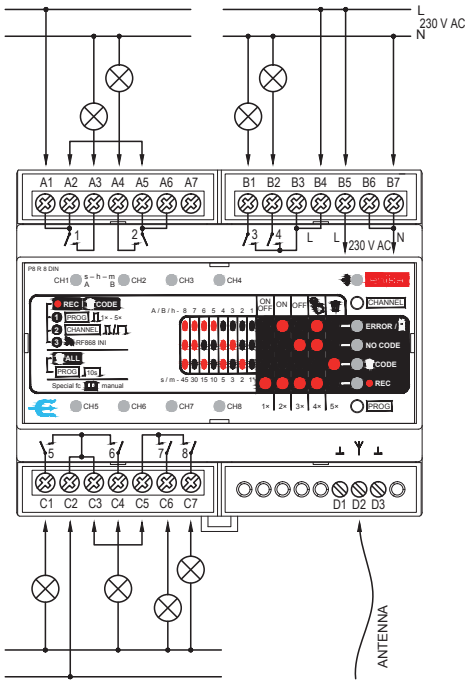
P8 8 DIN

8-channel universal receiver Poseidon®

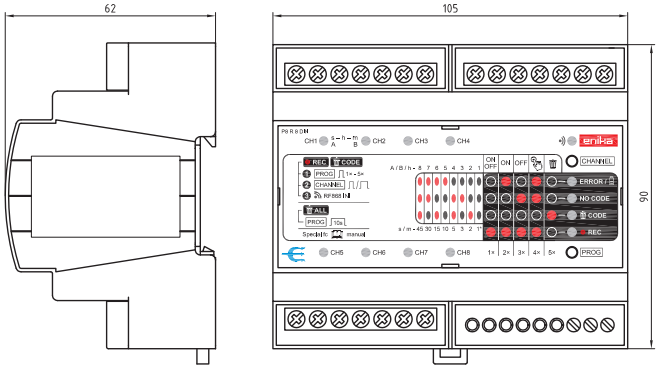
easy to setup | suitable for switching of all kinds of load | external antenna connection | RF signal repeater

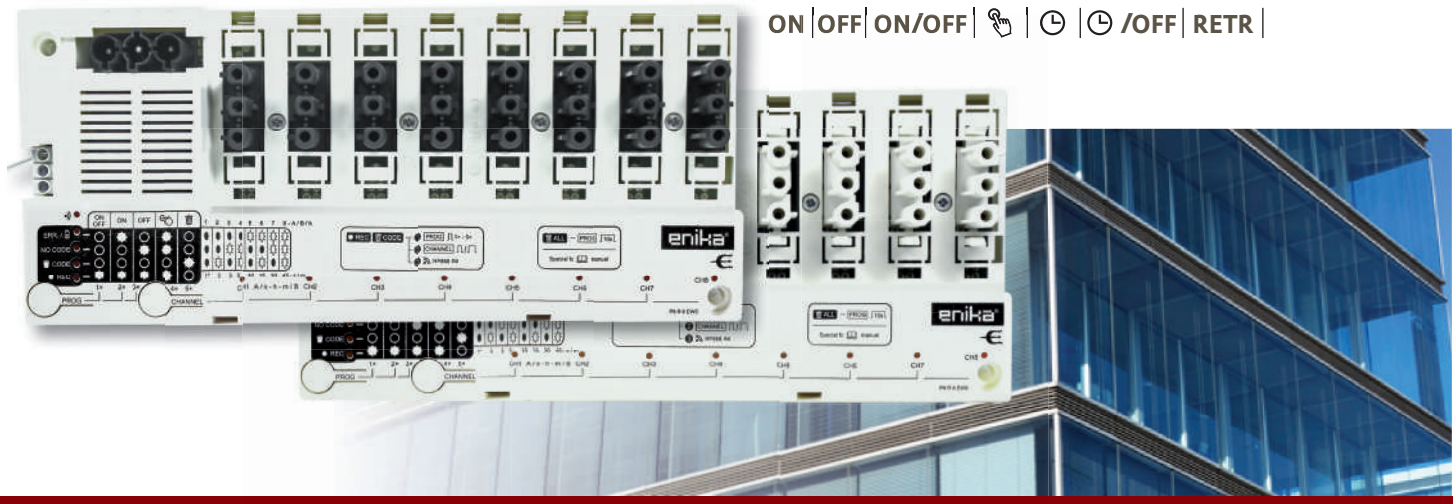
A module-type receiver for easy mounting on a DIN rail enables to control eight channels and is available in a compact size. In addition to conventional functions, it can also be used as a signal repeater. It is well suited when a request to extend the number of control circuits occurs or wherever the propagation of RF signals is a problem.

	P8 R 8 DIN	P8 R 8 DIN>24V
Power supply	230 V ±10 % 50 Hz	24 V~= ±20 %
Max. switching power	2300 W (Incandescent lamps, halogen lamps)	
	1750 VA (Inductive loads, eletronic ballasts	
	500 VA / 64 µF (Fluorescent tubes)	
	400 W (compact fluorescent lamps, compact LED lamps)*	
Number of channels	8	
Protection	IP20 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
Output protection	external (max. 16 A) per group of contacts	
Dimensions	6 M	
Weight	430 g	
Terminal blocks	screw-type, max. 4 mm^2	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 300 m (open area)	
Maximum number of codes stored in the memory	32	



THE CONTACTS ARE SHOWN IN IDLE STATE





P8 R 8 E3, P8 R 8 W3

8-channel receiver Poseidon® to install in a suspended ceiling

easy to setup | suitable for switching of all kinds of load | external antenna connection | RF signal repeater

P8 R 8 E3

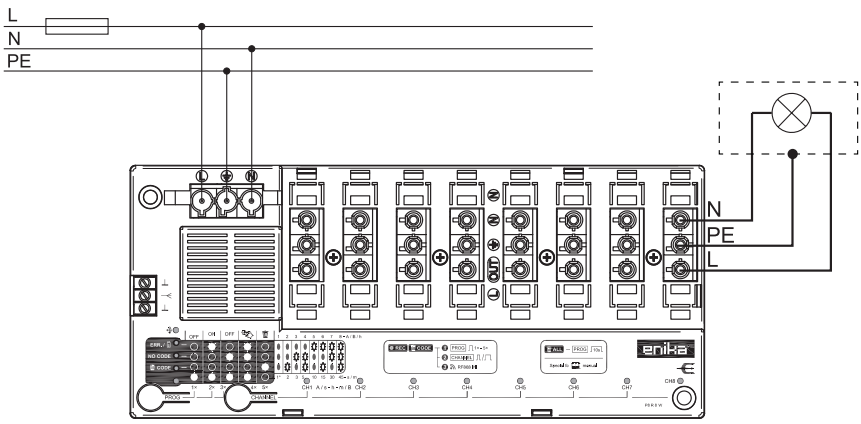
The receiver is primarily intended for applications in commercial buildings where emphasis is placed on the compatibility with Ensto-net connector system. It enables control of eight channels. It can also be used as a signal repeater or wherever the propagation of RF signal is a problem.

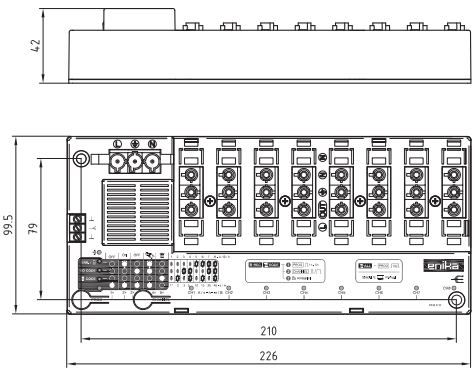
P8 R 8 W3

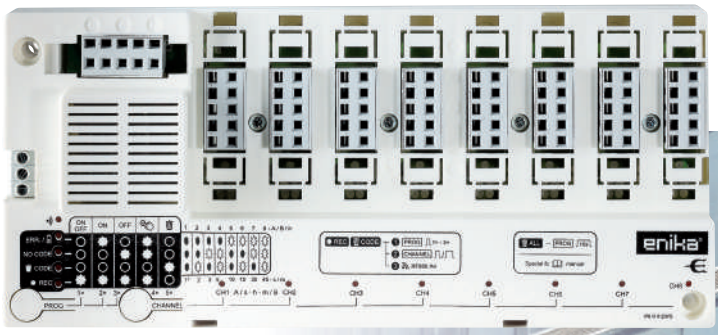
The main advantages of this receiver are reliability and compatibility with Wieland connector system. It is primarily intended for applications in commercial buildings. You can also use it as a signal repeater or wherever the propagation of RF signal is a problem.

	P8 R 8 E3	P8 R 8 W3
Power supply terminals	GST18i3LS1VSW	NAC31. W
Power supply	230 V ±10 % 50 Hz	
Output terminals	GST18I3LB1VSW	NAE32V. W
Max. switching power	2300 W (Incandescent lamps, halogen lamps)	
	1750 VA (Inductive loads, eletronic ballasts)	
	500 VA / 64 µF (Fluorescent tubes)	
	400 W (compact fluorescent lamps, compact LED lamps)*	
Number of channels	8	
Protection	IP20 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
Output protection	external (max. 16 A)	
Weight	490 g	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 300 m (open area)	
Maximum number of codes stored in the memory	32	

The maximum current for all channels shall not exceed 16 A!







ON | OFF | ON/OFF | | | /OFF | RETR |

P8 R 8 S3

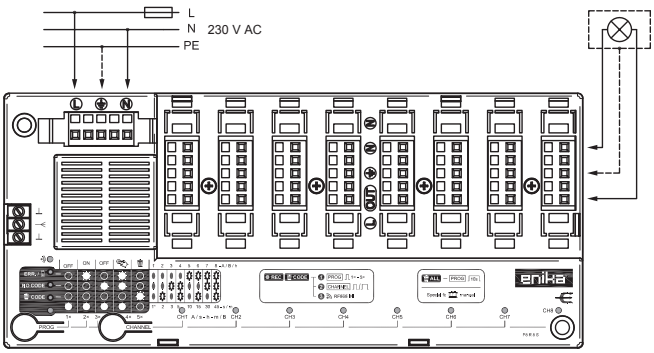
8-channel receiver Poseidon® to install in a suspended ceiling

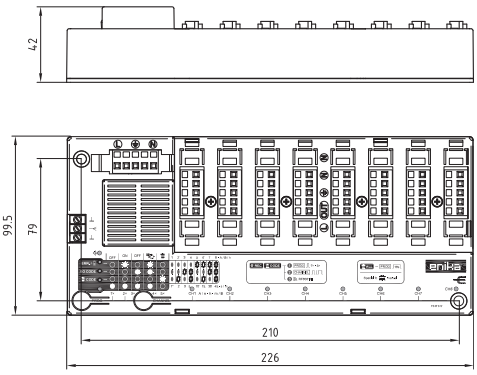
easy to setup | suitable for switching of all kinds of load | external antenna connection | RF signal repeater

The main advantages of this receiver are reliability and simple connection using screwless terminals. It is primarily intended for applications in commercial buildings. You can also use it as a signal repeater or wherever the propagation of RF signal is a problem.

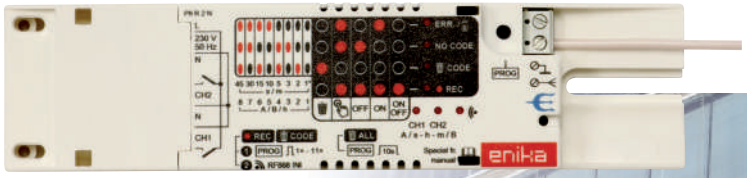
Power supply	230 V ±10 % 50 Hz
Max. switching power	2300 W (Incandescent lamps, halogen lamps)
	1750 VA (Inductive loads, eletronic ballasts)
	500 VA / 64 µF (Fluorescent tubes)
	400 W (compact fluorescent lamps, compact LED lamps)*
Number of channels	8
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Output protection	external (max. 16 A)
Weight	490 g
Screwles terminal blocks	0.5 mm^2 to 1.5 mm^2
Operating frequency	868 MHz
Range with the supplied antenna	up to 300 m (open area)
Maximum number of codes stored in the memory	32

The total maximum current for all channels must not exceed 16 A!





ON | OFF | ON/OFF | | | /OFF | RETR |

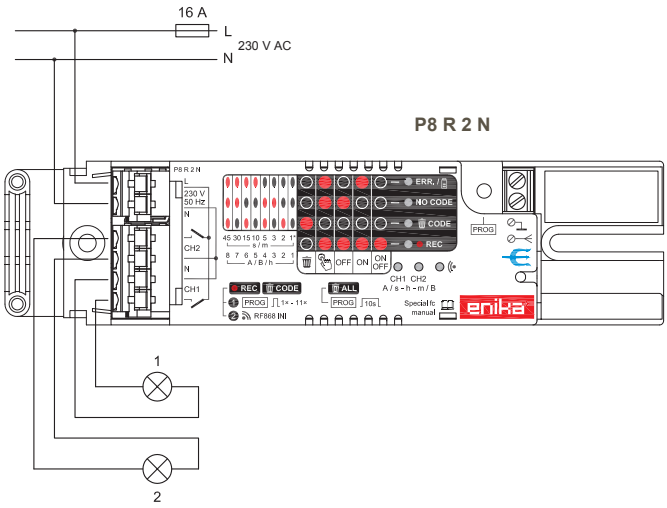


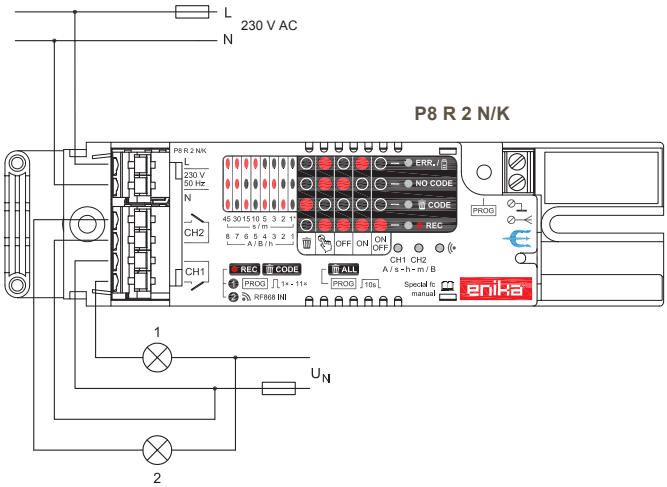
P8 R 2 N, P8 R 2 N/K

2-channel built-in receiver Poseidon®

easy to setup | suitable for switching of all kinds of load | possibility of connecting an external antenna | RF signal repeater

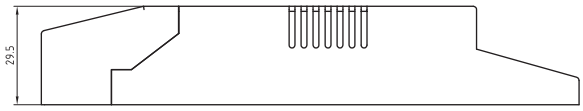
A specifically designed receiver that is suitable for installation in light fittings, suspended ceilings and whenever a confined space exists. It controls two independent circuits; thanks to applied relay types, it is suitable for switching of all kinds of load. Its advantage also rests in the possibility of having the connecting leads fixed.

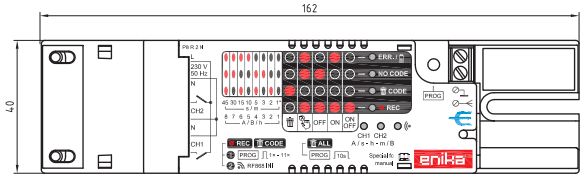


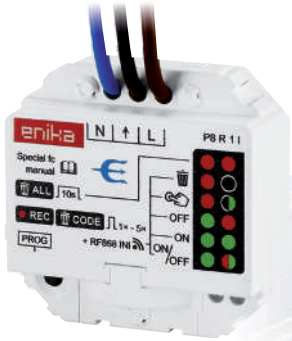


	P8 R 2 N	P8 R 2 N/K
Power supply	230 V ±10 % 50 Hz	
Max. switching power	2300 W (Incandescent lamps, halogen lamps)	potential-free contact
	1750 VA (Inductive loads, eletronic ballasts)	
	500 VA / 64 µF (Fluorescent tubes)	
	400 W (compact fluorescent lamps, compact LED lamps)*	
Number of channels	2	
Protection	IP20 acc. to EN 60529	
Operating temperature	–20 to +55 °C	
Output protection	external (max. 16 A)	
Weight	120 g	
Screwles terminal blocks	max. 2.5 mm²	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 150 m (open area)	
Maximum number of codes stored in the memory	32	

The total maximum current for all channels must not exceed 16 A!







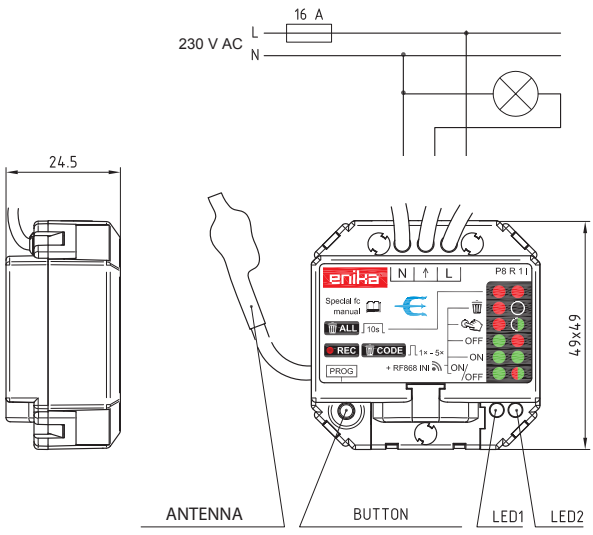
P8 R 1 I

1-channel built-in receiver Poseidon®

compact sizes | suitable for switching of all kinds of load | easy to setup | RF signal repeater

Thanks to its compact size, it is designed for installation in a standard junction box (e.g. KU68). In addition to conventional functions, it can be used as a signal repeater in places with limited access where the propagation of RF signal is a problem.

Power supply	230 V ±10 % 50 Hz
Max. switching power	2300 W (Incandescent lamps, halogen lamps)
	1750 VA (Inductive loads, eletronic ballasts)
	500 VA / 64 µF (Fluorescent tubes)
	400 W (compact fluorescent lamps, compact LED lamps)*
Number of channels	1
Protection	IP20 acc. to EN 60529
Operating temperature	–20 to +55 °C
Output protection	external (max. 16 A)
Weight	60 g
Connecting wires	1.5 mm² / 80 mm
Operating frequency	868 MHz
Range with the supplied antenna	up to 150 m (open area)
Maximum number of codes stored in the memory	32



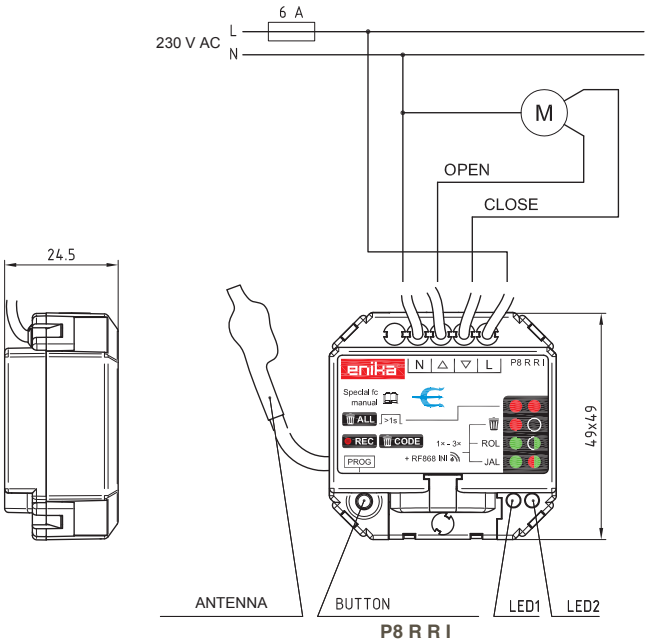
P8 R R I, P8 R R I 24 V

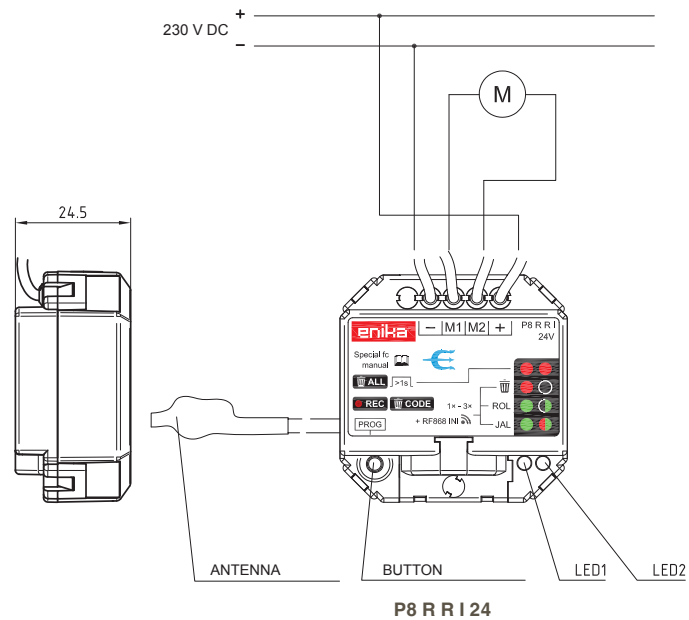
Jalousie built-in receiver Poseidon®

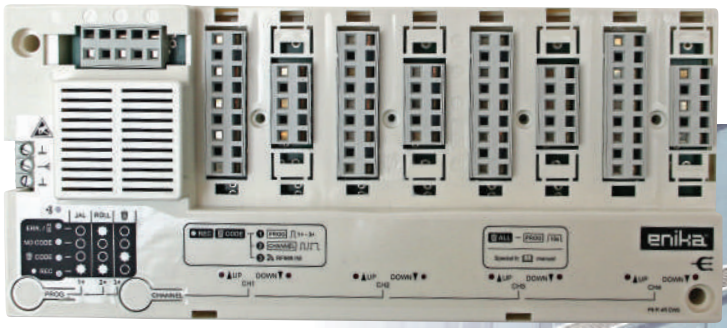
compact size | fine positioning of jalousie slats | easy to setup | RF signal repeater

A universal control unit specifically designed for roller shutters or louvers. Thanks to its compact size, it is suitable for installation in a standard junction box (e.g. KU68) both for roller shutters and jalousies.

	P8 R R I	P8 R R I 24
Power supply	230 V ±10 % 50 Hz	24 V DC
Maximum switching power	230 V/3 A, cosφ>0.8	24 V DC/1 A (1 mF)
Number of channels	1 motor	
Protection	IP20 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
Output protection	external (max. 6 A)	
Weight	60 g	
Connecting wires	0.5 mm² / 80 mm	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 150 m (open area)	
Maximum number of codes stored in the memory	32	







P8 R 4R S, P8 R 4R E, P8 R 4R W

4-channel jalousie receiver Poseidon®

easy to setup | control of jalousies, shutters and window blinds | external antenna connection | RF signal repeater

The jalousie receiver is used for remote control of up to four devices, external window blinds and jalousies. Outputs of receiver are four pairs of relays. The jalousie receiver is designed especially for suspended ceiling or built-in mounting in commercial and office buildings.

P8 R 4R S

Connection to the power supply as well as to the receiver outputs is done by screwless terminals.

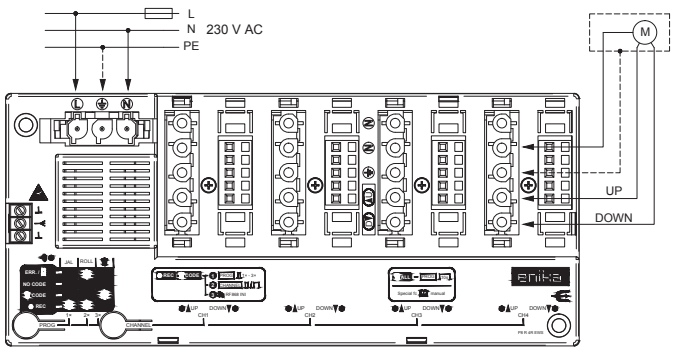
P8 R 4R E

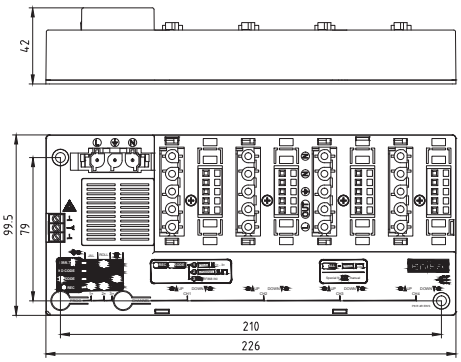
Connection to the power supply as well as to the receiver outputs is made via Ensto-net connectors.

P8 R 4R W

Connection to the power supply as well as to the receiver outputs is made via Wieland connectors.

Power supply	230 V ±10 % 50 Hz
Max. switching power	3 A cos φ > 0,8
Number of channels	4× motors
Switching elements	relay
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	490 g
Connecting terminals (P8 R 4R S)	screwless 0.5 mm^2 to 1.5 mm^2
Operating frequency	868 MHz
Range	up to 150 m (open area)
Number of codes (combinations)	2^{24}
Maximum number of codes stored in the memory	32





ON | OFF | ON/OFF | | | /OFF | RETR | DIMM | | DIR

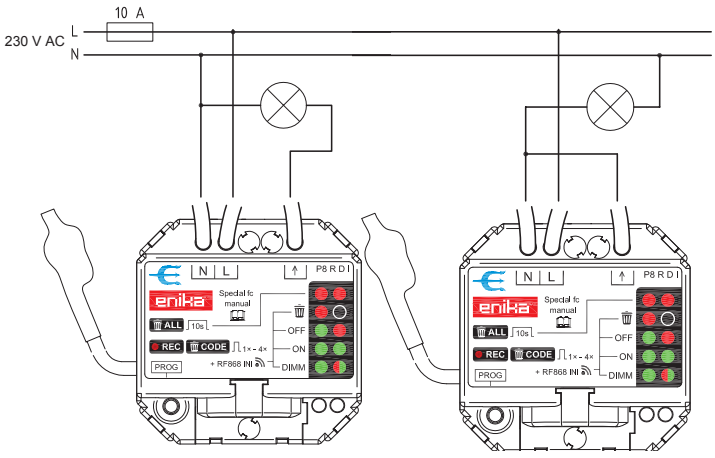
P8 R D I, P8 R D I/LED

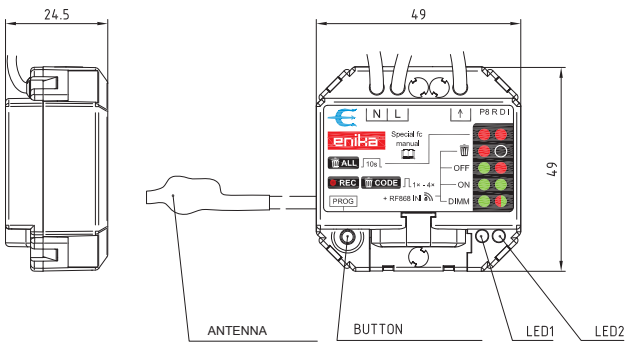
Universal receiver Poseidon® for control of lighting

easy to setup | RF signal repeater | advanced functions using configuration software Posedion® Asistent | compatible with Poseidon®

It is possible to connect dimmable light sources including LED using two or three wires. These are the main advantages of this compact receiver that is suitable for installation directly into a standard junction box or whenever a lack of space exists.

Power supply	230 V ±10 % 50 Hz
Switching power range (3-wire)	20 to 200 W resistive load, conventional bulbs, mains halogen bulbs
	20 to 175 VA electronic multipliers
Switching power range (2-wire)	35 to 200 W resistive load, conventional bulbs, mains halogen bulbs
	60 to 175 VA electronic multipliers
Type of control	falling edge (R,C)
Ambient temperature range	-20 to +40 °C at installation in the junction box
	-20 to +55 °C at installation inside the switchboard
Short-circuit fuse	electronic, reversible
Thermal fuse	electronic, 2-step reversible, (reduction of output power, output off)
	drop out, non-reversible 117 °C
Connecting wires	0.5 mm² / 80 mm





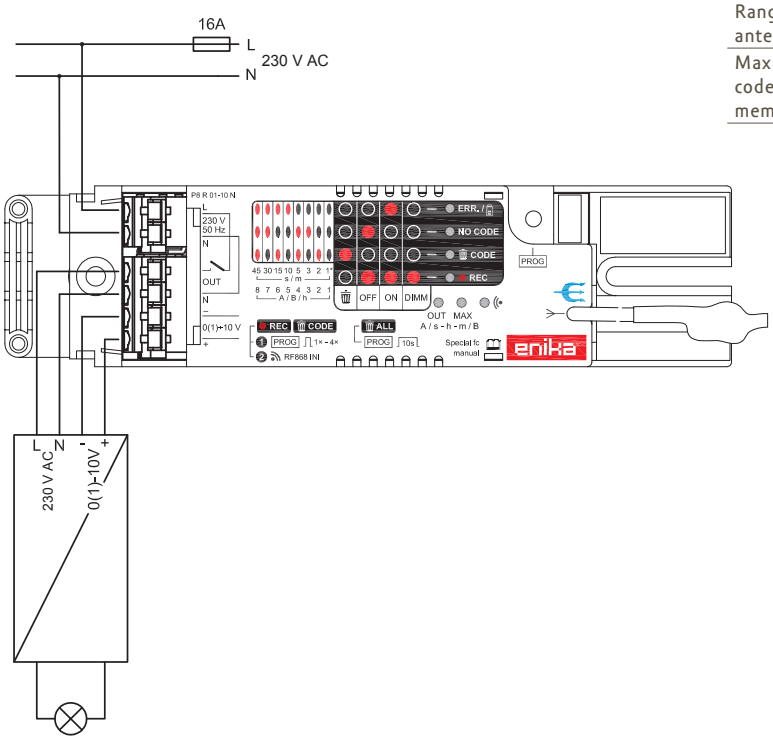
P8 R 01-10 N

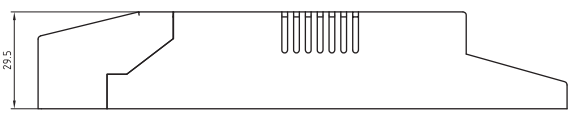
1-channel receiver with relay and analogue output

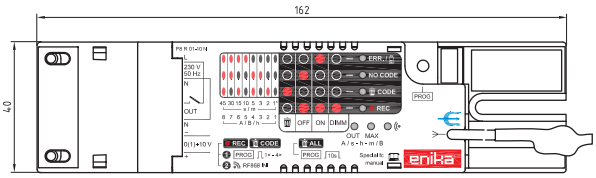
compatible with Poseidon® | suitable for switching of all kinds of load | easy to setup | RF signal repeater

It is designed to control dimmable ballasts by means of analogue signals 1 - 10 V, or instruments that use analogue control 0 - 10 V. It is adapted for installation in light fittings, suspended ceilings and other confined spaces.

Power supply	230 V ±10 % 50 Hz
Max. switching power	2300 W (Incandescent lamps, halogen lamps)
	1750 VA (Inductive loads, electronic ballasts)
	500 VA / 64µF (fluorescent tubes)
	400 W (compact fluorescent lamps, compact LED lamps)
Output control signal	0-10 ±0,25 V= max. 2,5 mA
	1-10 ±0,25 V= max. -100 mA
Number of channels	1
Protection	IP 20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Output protection	external (max. 16 A)
Weight	120 g
Screwless connection terminals	max. 2.5 mm²
Operating frequency	868 MHz
Range with the supplied antenna	up to 150 m (open area)
Maximum number of codes stored in the memory	32







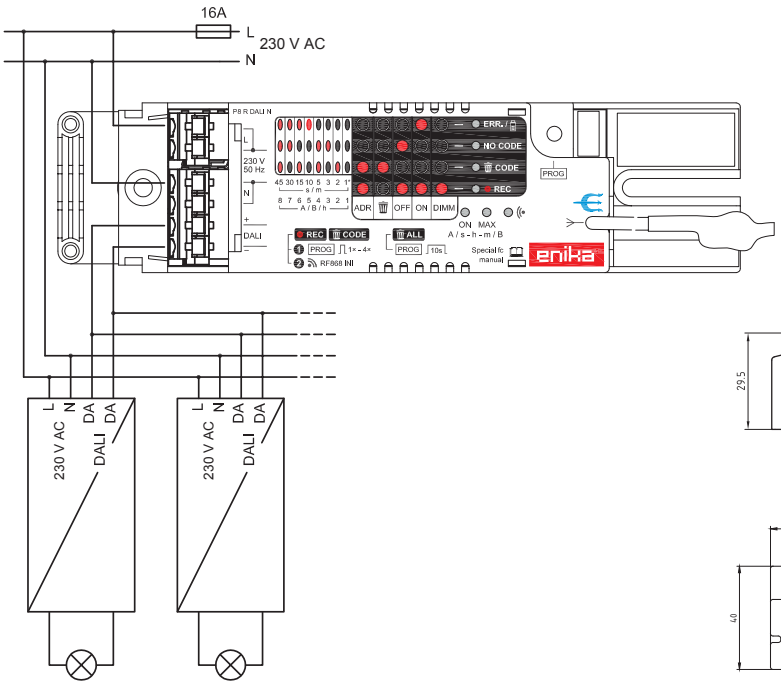
P8 R DALI N

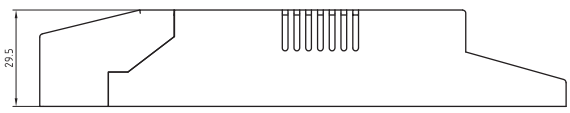
Built-in receiver Poseidon® with DALI output

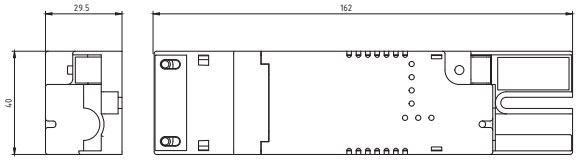
easy to setup | integrated power supply for DALI bus | RF signal repeater | compatible with Poseidon®

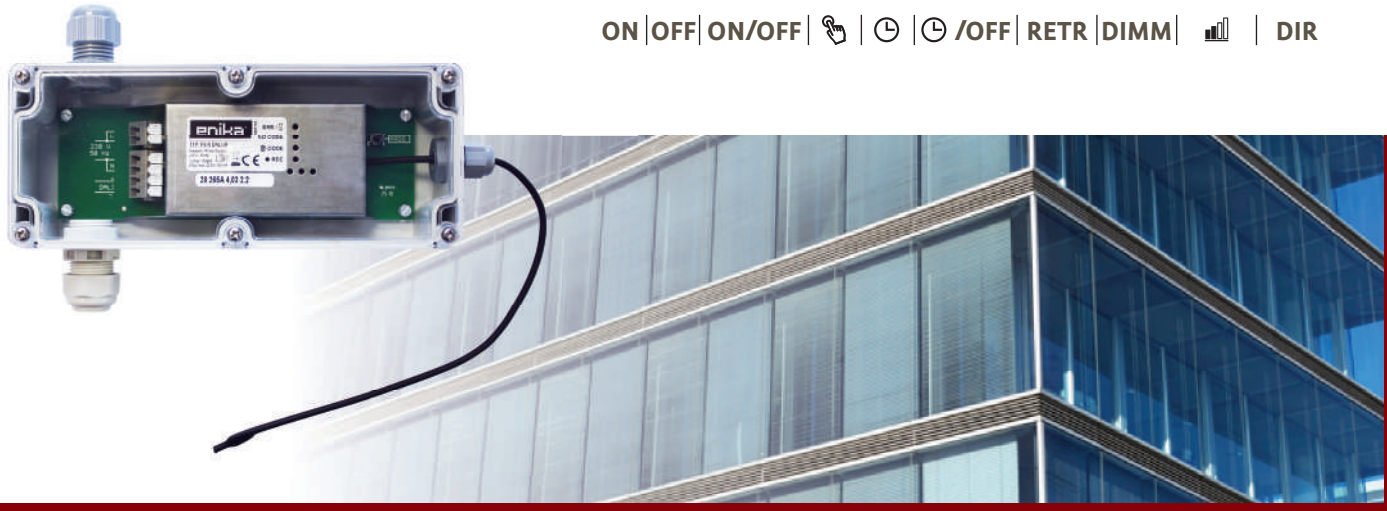
The **P8 R DALI N** is designed to control the light fittings equipped with DALI ballasts. In basic mode, it enables control of one group of light fittings. If the Poseidon® Asistent software and P8 TR USB configuration transmitter are used, it is possible to take advantage of the DALI bus and set up to 4 separate groups of light fittings. It is adapted for installation in light fittings, suspended ceilings and other confined spaces.

Power supply	230 V ±10 % 50 Hz
DALI bus power supply	max. 20,5 V 130 mA
Max. number of ballasts	64 in four groups
Protection	IP 20 acc. to EN 60529
Operating temperature	-20 to + 55 °C
Weight	120 g
Screwless connecting terminals	max. 2,5 mm2
Operationg frequency	868 MHz
Range	150 m (open area)
Maximum number of codes in the memory	max. 32









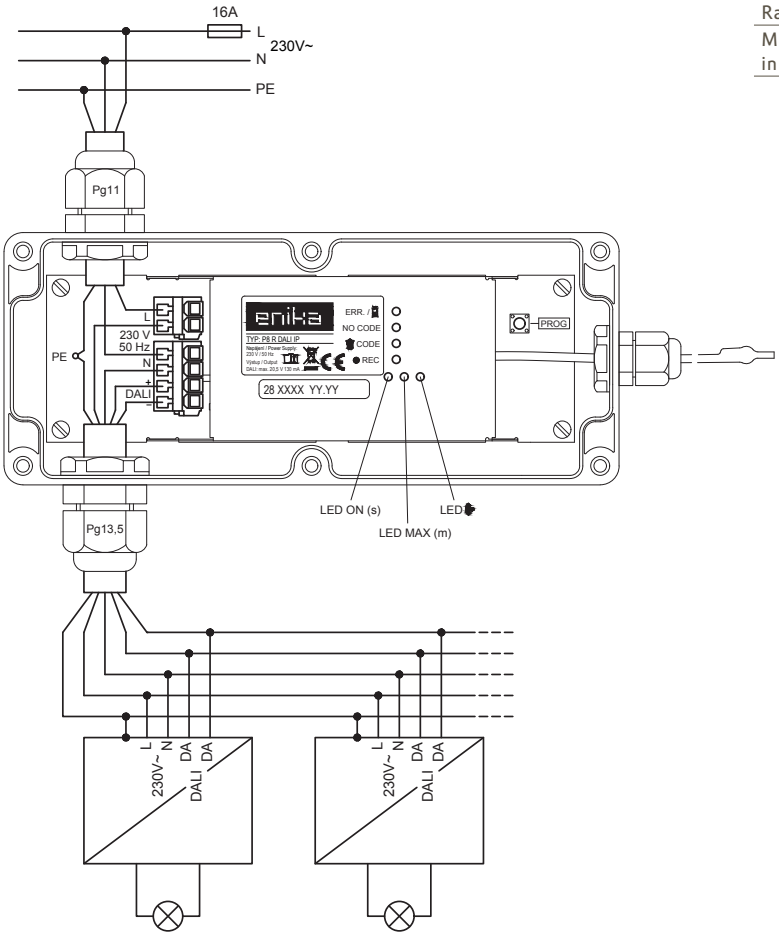
P8 R DALI IP

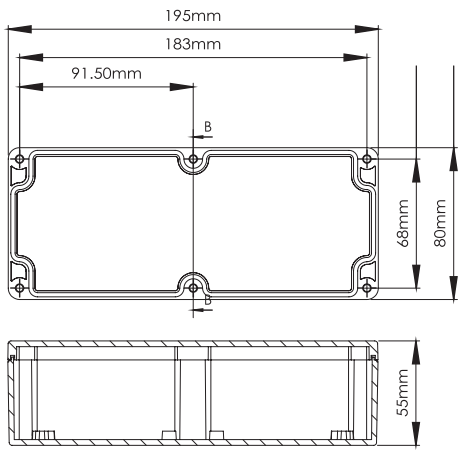
Industrial receiver Poseidon® with DALI output

High ingress protection IP65 | integrated power supply for DALI bus | RF signal repeater | compatible with Poseidon®

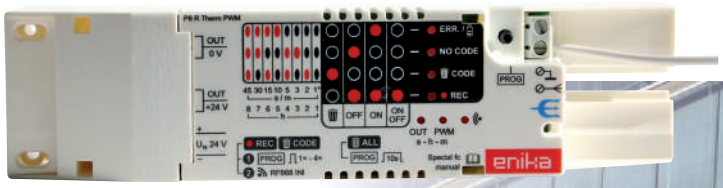
It is designed to control luminaires equipped with DALI ballasts. In the basic mode, it allows you to control one group of luminaires. By using the Poseidon Asistent software and configuration transmitter P8 TR USB, it is possible to utilise the DALI bus features and set up to 4 separate groups of luminaires. Thanks to its mechanical design, it is suitable for industrial use.

Power supply	230 V ±10 % 50 Hz
DALI bus power supply	max. 20,5 V 130 mA
Max. number of ballasts	64 in four groups
Protection	IP 65 acc. to EN 60529
Operating temperature	-20 to + 55 °C
Weight	375 g
Screwless connecting terminals	max. 2,5 mm2
Cable glands	Pg11 (ø5 to ø10 mm) + Pg13,5 (ø6 to ø12 mm)
Operationg frequency	868 MHz
Range	150 m (open area)
Maximum number of codes in the memory:	max. 32





ON | OFF | ON/OFF | | | /OFF | RETR | | DIR



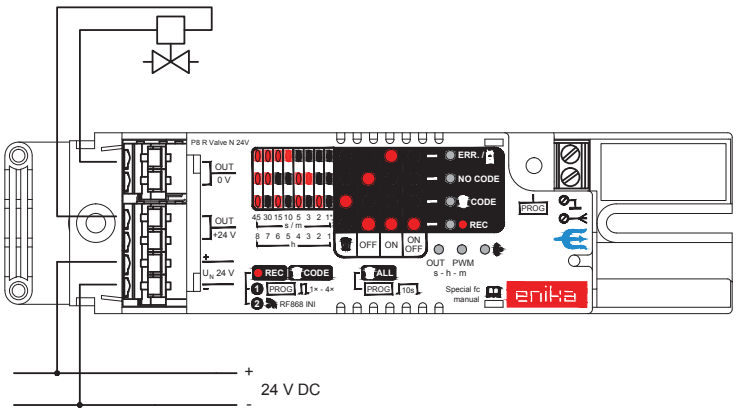
P8 R VALVE N 24 V

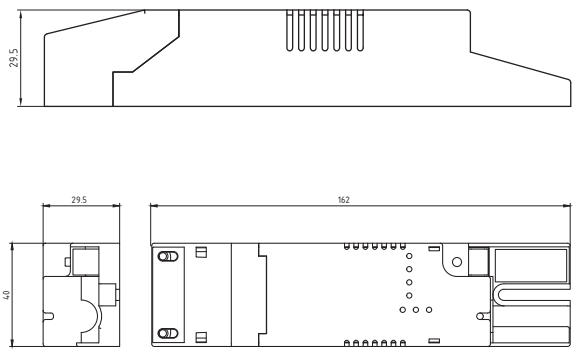
Built-in receiver Poseidon® with PWM output

compatible with Poseidon® | to control heaters | easy to setup

It is used to control the output power of heating units. Control is performed through PWM signal of the receiver connected to the thermostatic valves.

Power supply	24 V DC ±10 %
Output	24 V DC, max. 2 A resistive load
PWM period setting range	10 sec to 2 hrs
Preset value of PWM period	10 minutes
Preset value of PWM	100 %
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Weight	80 g
Connection terminals	screwless type, max. 2.5 mm²
Operating frequency	868 MHz
Range with the supplied antenna	150 m (open area)
Maximum number of codes stored in the memory	32





Poseidon® occupancy and light regulators

ceiling mounted | surface mounted | high bay | built-in

The regulation of indoor lighting depending on the amount of lighting coming into the room from outside is one of the modern ways of lighting control. The integrated movement sensor prevents unnecessary lighting in empty offices, corridors or aisles between warehouse racks. One controller allows you to simultaneously maintain two different lighting levels of two groups of light fittings. In some cases the use of controllers can save more than 70 % of the energy consumed by lighting. The advantages of Poseidon® occupancy and light regulators include: easy installation, precise system of integration into building automation systems, comfortable setting and making changes using Poseidon® Asistent software. The regulators are connected to 230 V standard mains voltage.

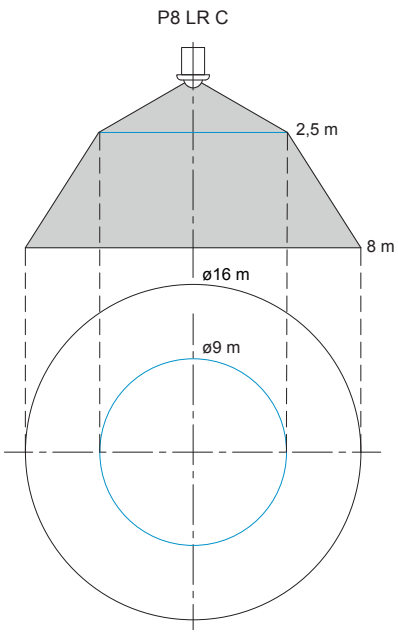
P8 LR C

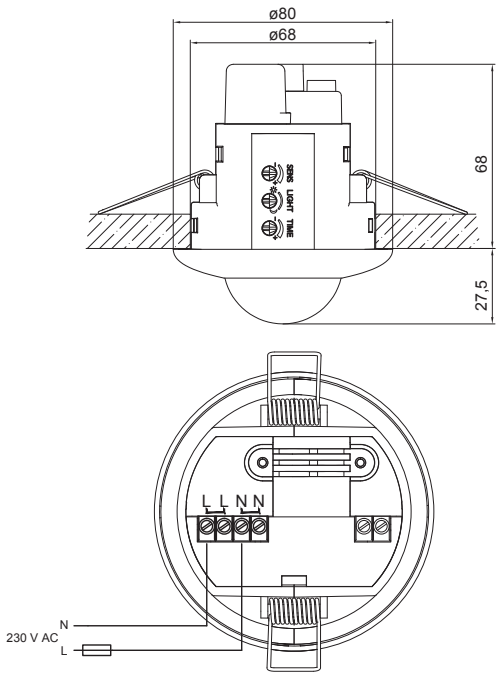
Ceiling mounted light regulator with occupancy detector

easy to install | savings up to 70 % | movement and light sensors | flexible configuration with Poseidon® Asistent software

Motion sensor with integrated lighting regulator designed especially to control the P8 R DALI N and P8 R 01-10 N receivers. The regulator smoothly controls the level of output depending on the level of external lighting. It therefore contributes to user comfort and the supervision of good working conditions, especially in larger offices, call centres, etc. There is also the possibility of integration into a superior systems (BMS, MaR). Possible to be used as a signal repeater.

Power supply	230 V ±10 % 50 Hz
Timer settings range	about 5 sec to 105 min
Range of ambient light influence	0.5 to 12 288 lx
Operating frequency	868 MHz
Range	up to 150 m (open area)
Max. number of codes stored in the memory	32
Protection	IP40 acc. to EN 60529
Operating temperature	-20 to +55 °C
Transmitted information	presence
	curent illumination value (lx)
	value of the required light output of light fittings (%)





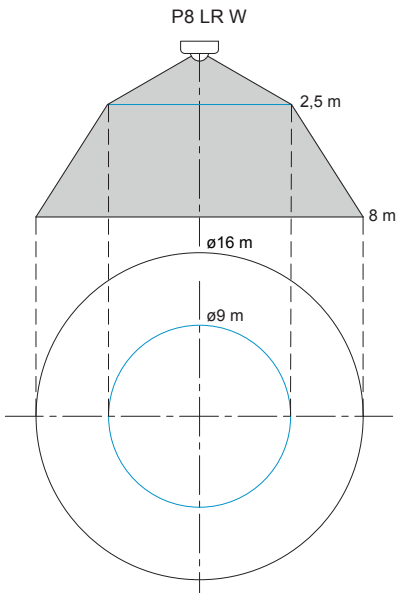
P8 LR W

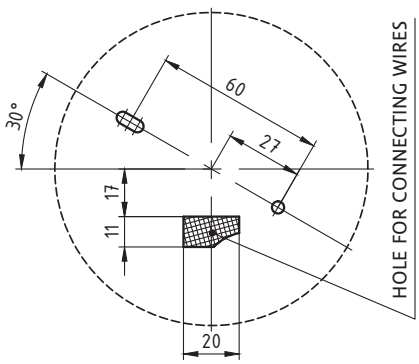
Surface mounted light regulator with occupancy detector

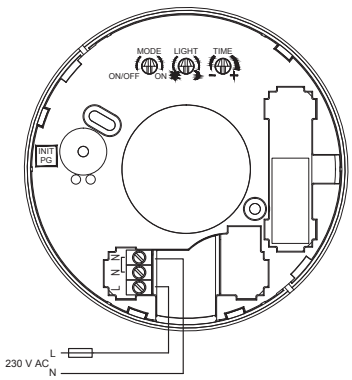
Mounting height up to 8m | circular sensing characteristic | easy and fast installation | RF signal repeater

Motion sensor with integrated lighting regulator designed especially to control the P8 R DALI N and P8 R 01-10 N receivers. The regulator smoothly controls the level of output depending on the level of external lighting. It therefore contributes to user comfort and the supervision of good working conditions, especially in larger offices, call centres, etc. There is also the possibility of integration into a superior systems (BMS, MaR). Possible to be used as a signal repeater.

Power supply	230 V ±10 % 50 Hz
Timer settings range	about 5 sec to 105 min
Range of ambient light influence	0.5 to 12 288 lx
Operating frequency	868 MHz
Range	up to 150 m (open area)
Max. number of codes stored in the memory	32
Protection	IP40 acc. to EN 60529
Operating temperature	-20 to +55 °C
Transmitted information	presence
	curent illumination value (lx)
	value of the required light output of light fittings (%)







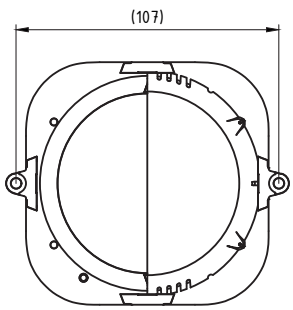
P8 LR HL

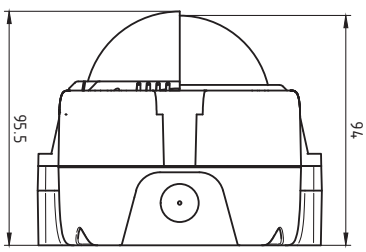
Light sensor with integrated curve regulator

easy and fast installation | IP67 protection

Industrial motion sensor with IP 67 protection and integrated curve regulator. It is designed for lighting control dependant on the contribution of daylight. The sensor can manage up to 4 sections with different settings taking into account external light and the internal power requirements. It is mainly suitable for large logistics centres and production halls, and can be integrated into superiors systems (BMS, MaR). The sensor can also be used as a signal repeater.

Power supply	230 V ±10 % 50 Hz
Range of ambient light	0.5 to 12 288 lx
Operating frequency	868 MHz
Range	up to 150 m (open area)
Max. number of codes stored in the memory	32
Protection	IP40 acc. to EN 60529
Operating temperature	-20 to +55 °C
Transmitted information	curent illumination value (lx)
	value of the required light output of light fittings (%)





P8 LR HC, P8 LR HF

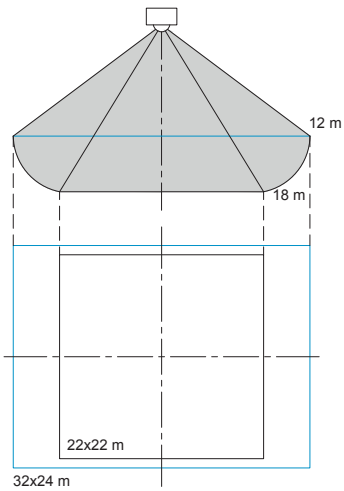
High bay occupancy and light regulator Poseidon®

Mounting height up to 18m | circular and corridor sensing characteristics | IP67 protection | easy and fast installation | **RF signal repeater**

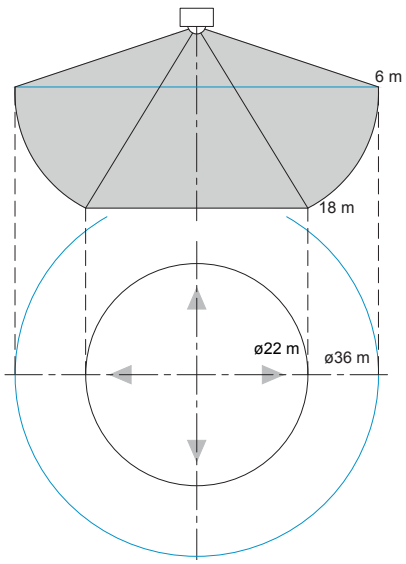
Industrial motion sensor with IP 67 protection and integrated regulator enabling feedback or curve control. Mounting height of up to 18m. The sensor is available with circular or rectangular sensing characteristics, with the option to define a specific space by means of cover plates. Possibility of integration into superior systems (BMS, MaR).

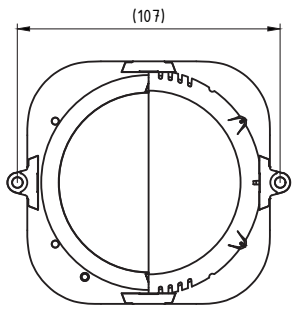
	P8 LR HC	**P8 LR HF**
Monitored area	corridor	circular
Power supply	230 V ±10 % 50 Hz	
Range of ambient light	0,5 ÷ 12 288 lx	
Operating frequency	868,3 MHz	
Range	up to 150 m (open area)	
Max. number of codes stored in the memory	32	
Protection	IP67 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
Connection terminals	WAGO 222-412 max. 2,5 mm²	
Transmitted information	presence	
	curent illumination value (lx)	
	value of the required light output of light fittings (%)	

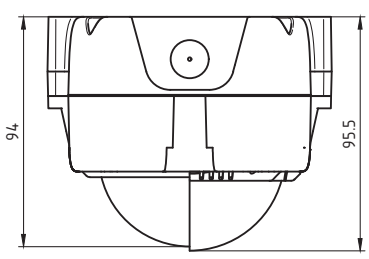
P8 LR HC



P8 LR HF







P8 LR HC DL, P8 LR HF DL, -DLM

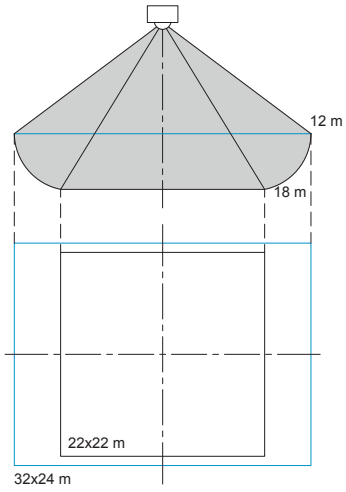
High bay light regulator with occupancy detector

Mounting height up to 18m | circular and corridor sensing characteristics | IP67 protection | easy and fast installation | **RF signal repeater**

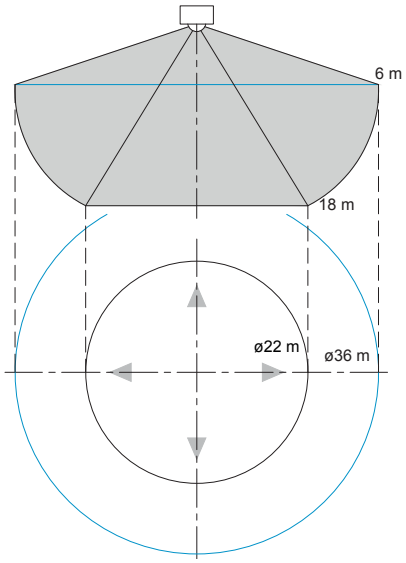
IP67 Industrial motion sensor with integrated regulator for controlling light depending on the external lighting conditions. Can be mounted at a height of up to 18m and is available with or without DALI output. The sensor is available with circular or rectangular sensing characteristics, with the option to define a specific space by means of cover plates. Possibility of integration into superior systems (BMS, MaR).

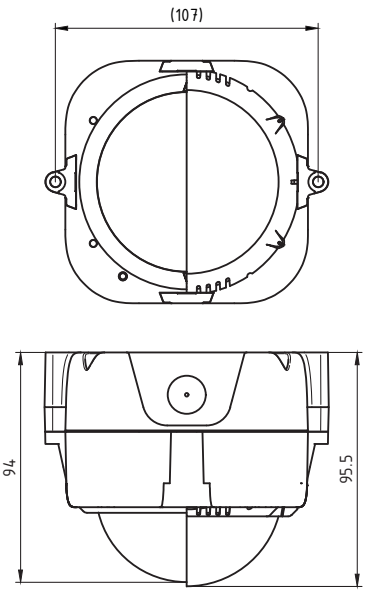
	P8 LR HC DL	P8 LR HF DL	P8 LR HC DLM	P8 LR HF DLM
Monitored area	corridor	circular	corridor	circular
Output	DALI			
Max. number of ballasts	64 in four groups			
DALI bus power supply	NO	NO	YES	YES
Power supply	230 V ±10 % 50 Hz			
Range of ambient light influence	0,5 ÷ 12 288 lx			
Operating frequency	868,3 MHz			
Range	up to 150 m (open area)			
Max. number of codes stored in the memory	32			
Protection	IP67 acc. to EN 60529			
Operating temperature	-20 to +55 °C			
Connection terminals	WAGO 222-412 max. 2,5 mm²			
Transmitted information	presence			
	curent illumination value (lx)			
	value of the required light output of light fittings (%)			

P8 LR HC DL



P8 LR HF DL

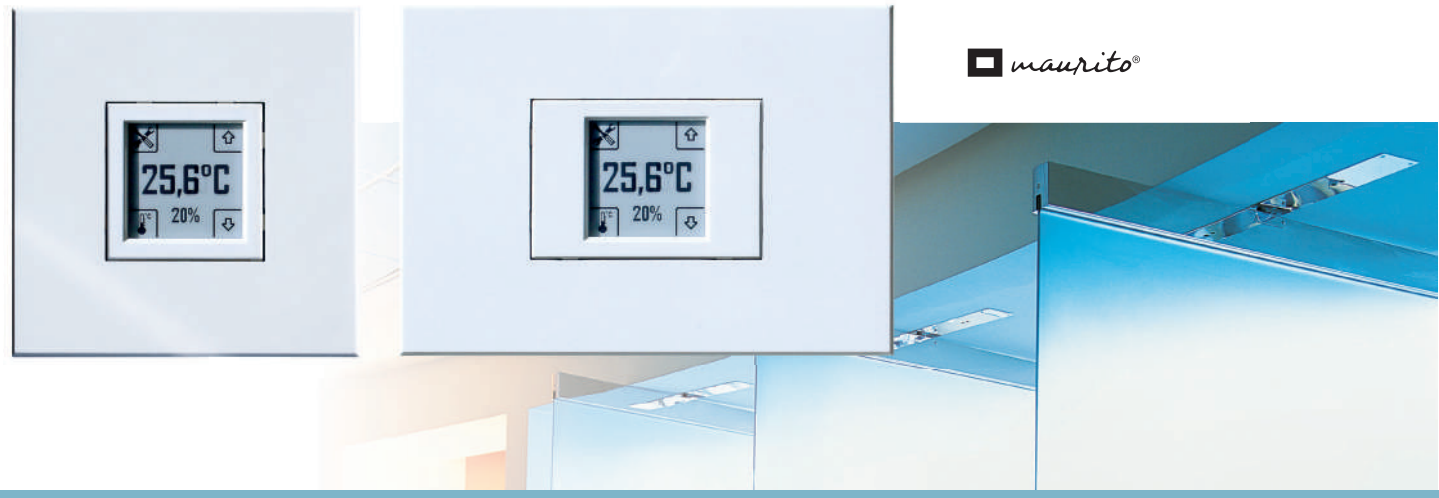




Poseidon® sensors

temperature | humidity | movement | flooding | CO_2

For the building automation and proper functioning of subsystems, the sensors, sometimes also referred to as peripherals of heating, air-conditioning or ventilation systems, play a key role. Properly adjusted and placed sensors ensure effective control of individual functional units of buildings, and thus are directly responsible for the comfort of users. When compared to conventional analogue sensors, the wireless sensors offer comparable connectivity with other parts of the system and also provide maximum flexibility at the start of building operation as well as for changes to the interior. The battery wireless sensors Poseidon® transmit not only the information on main variables, such as temperature, humidity and presence, but also the information on battery condition, and thus allow the building administrators to ensure smooth operation of the buildings.



P8 T Temp/RH/CR MS, P8 T Temp/RH/CR MR

Temperature and humidity sensor Poseidon® with correction

easy to install | range up to 150 m | compatible with Poseidon® | battery life 10 years

Offering a new type of transmitter with a low profile and an attractive design from series Maurito. The transmitter is used to measure and transmit the temperature and relative humidity in any space using wireless transmission. For the receipt and further processing of information, the P8 TR IP Ethernet interface is mainly used. The new and modern type of display is suitable for showing live, real-time values of temperature and relative humidity. Using the buttons on the transmitter, it is possible to set the transmitted value of the compensation in the range -9,5 K to +9,5 K.

Power supply	2 x CR2450
Accuracy of temperature measurement	±0.5 K in the range 0 to + 55 °C ±1 K in the range –20 to 0 °C
Protection	IP20 acc. to EN 60529
Operating temperature	–20 to +55 °C
Accuracy of relative humidity measurement	±3 % in the range 20 ÷ 80 % RH ±7 % in the range 0 to 20 %RH and 80 to 100 % RH
Operating frequency	868 MHz
Range	up to 150 m (open area)

01
white

P8 T Temp/RH/CR MS 01

37
onyx

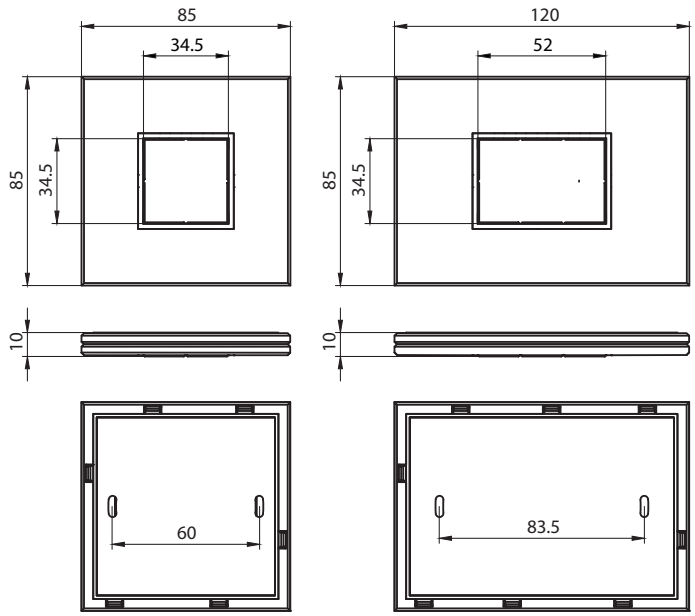
P8 T Temp/RH/CR MS 37

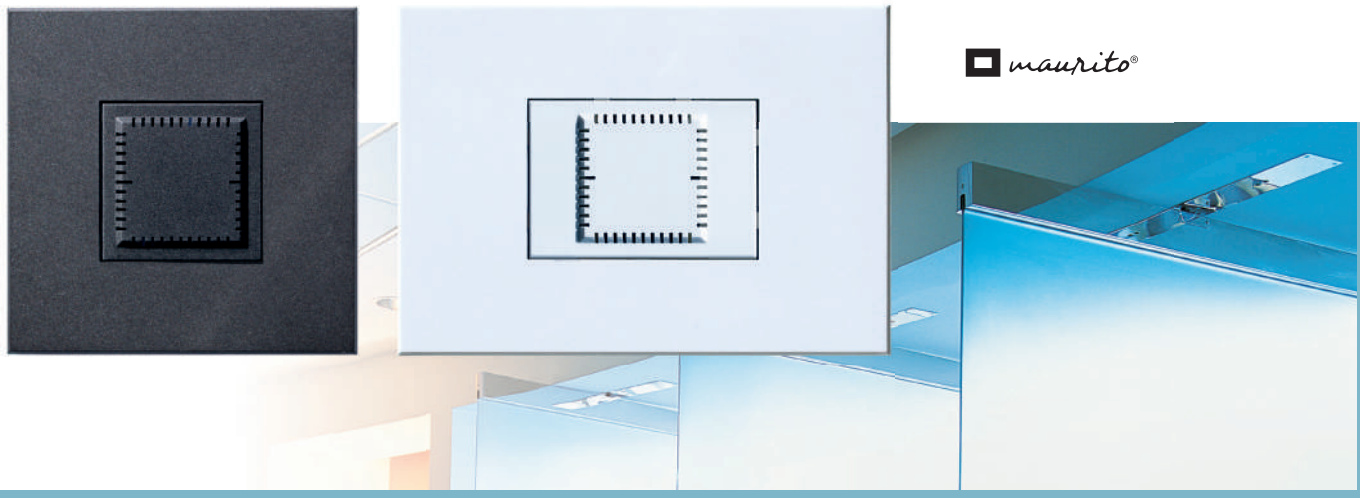
01
white

P8 T Temp/RH/CR MR 01

37
onyx

P8 T Temp/RH/CR MR 37





P8 T Temp/RH MS, P8 T Temp/RH MR

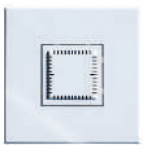
Temperature and humidity sensor Poseidon®

easy to install | range up to 150 m | compatible with Poseidon® | battery life 3 years

Offering a new series of temperature and humidity transmitters with an up-to-date, modern design, the Maurito Temp/RH is used to measure and transmit the temperature and relative humidity in the room using wireless transmission. For the receipt and further processing of data, the P8 TR IP Ethernet interface is mainly used.

Power supply	2 x CR2450
Accuracy of temperature measurement	±0.5 K in the range 0 to + 55 °C ±1 K in the range –20 to 0 °C
Protection	IP20 acc. to EN 60529
Operating temperature	–20 to +55 °C
Accuracy of relative humidity measurement	±3 % in the range 20 ÷ 80 % RH ±7 % in the range 0 to 20 %RH and 80 to 100 % RH
Operating frequency	868 MHz
Range	up to 150 m (open area)

03
white



P8 T Temp/RH MS 01

37
onyx

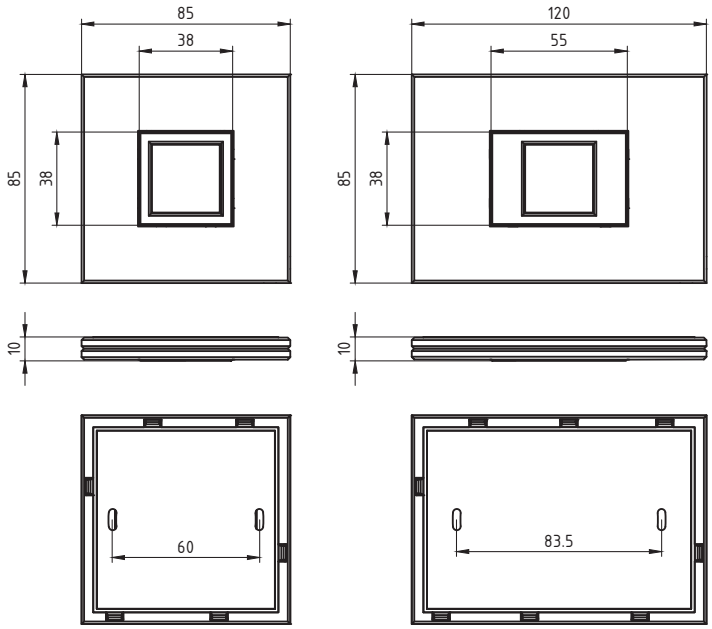
P8 T Temp/RH MS 37

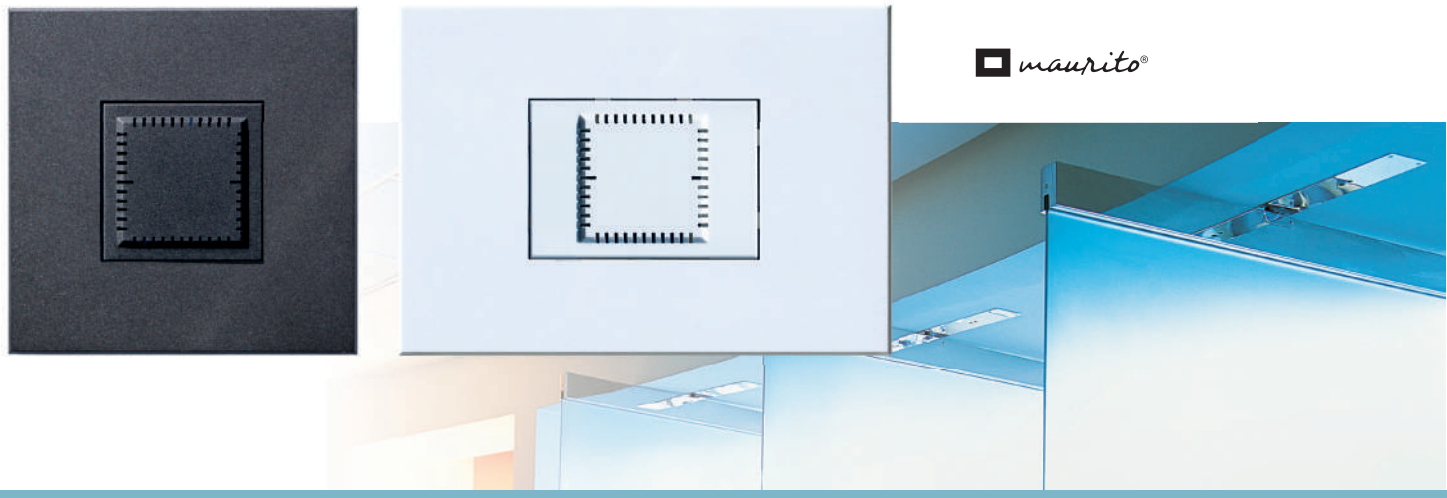
03
white

P8 T Temp/RH MR 01

37
onyx

P8 T Temp/RH MR 37





P8 T CO2 MS, P8 T CO2 MR

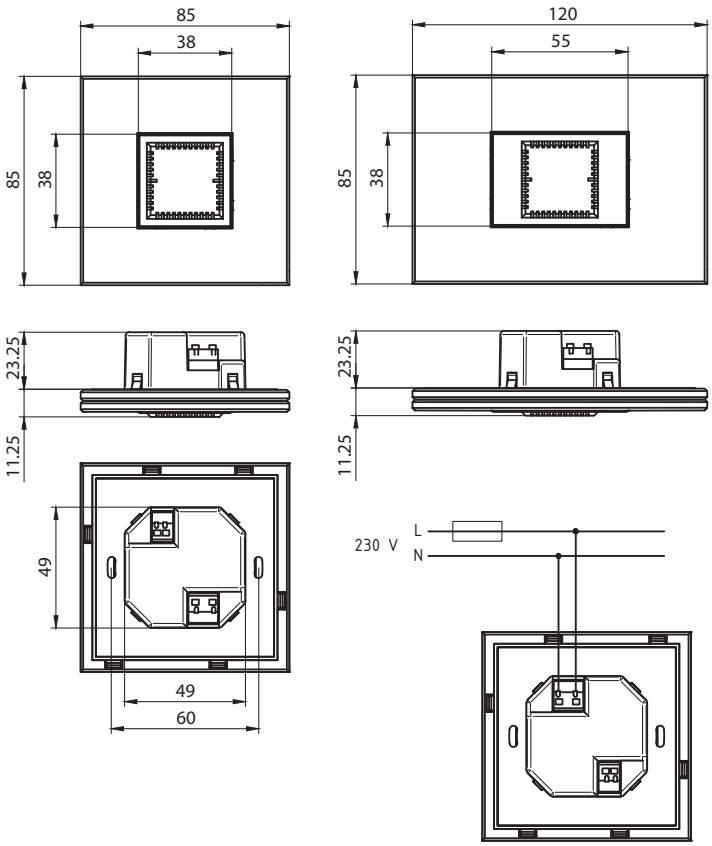
CO_2 sensor Poseidon®

easy to integrate into other systems | range up to 150 m | compatible with Poseidon®

A new universal sensor with a low profile and an attractive design from the series Maurito. This sensor is used to measure the concentration of carbon dioxide (CO_2), temperature and relative humidity. This sensor allows the user, three different ways of usage.

- Indication exceeding set limits of CO_2 by optical or acoustic signalization
- Wireless transmission of measured values are sent to the higher-level systems and the direct control components from Poseidon® system

Power supply	230 V ±10 % 50 Hz
Protection	IP20 acc. to EN 60529
Operating temperature	0°C to +45 °C
Measuring range CO_2	400 – 3 000 ppm
Accuracy of measured concentration of CO_2	±50 ppm + ±3% from value
Operating frequency	868 MHz
Range	up to 150 m (open area)



01
white

P8 T CO2 MS 01

37
onyx

P8 T CO2 MS 37

01
white

P8 T CO2 MR 01

37
onyx

P8 T CO2 MR 37

P8 T Temp, P8 T Temp/RH Time

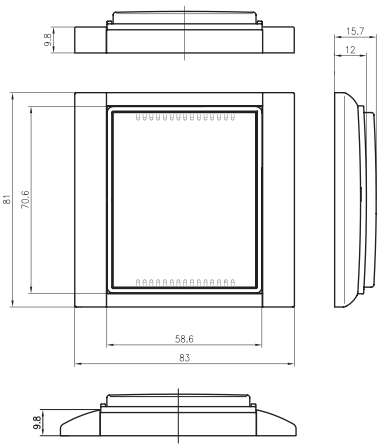
Temperature and humidity sensor Poseidon®

easy to install | range up to 150 m | compatible with Poseidon® | easy to integrate into other systems | battery life 3 years

The P8 T Temp transmitter is used to measure and transmit the temperature in the room using wireless transmission. For the receipt and further processing of this information, the P8 TR IP Ethernet interface is mainly used.

The P8 T Temp/RH is used to measure the temperature and relative humidity in the room and to transmit the same using wireless transmission. For the receipt and further processing, the P8 TR IP Ethernet interface is mainly used. The transmitter also allows you to set a limit value of humidity.
In cooperation with an appropriate receiver, it is then used for two-state control (hydrostat).

	P8 T Temp	P8 T Temp/RH
Power supply	2× 1.5 V, alkaline AAA (LR03)	
Accuracy of temperature measurement	±0.5 K in the range 0 to + 55 °C ±2 K in the range –20 to 0 °C	
Protection	IP20 acc. to EN 60529	
Operating temperature	–20 to +55 °C	
Accuracy of relative humidity measurement		±3 % in the range 20 to 80 % RH ±7 % in the range 0 to 20 % RH
Humidity control range		0 to 100 % RH
Operating frequency	868 MHz	
Range	up to 150 m (open area)	



transmitter + frame = complete transmitter

The wireless transmitters shown in figures consist of two parts, i.e. the proper transmitter functional part and the frame. These parts can be arbitrarily combined; when ordering, it is necessary to indicate the code of the switch + the code of the frame you desire.

03 white / white	**01** graphite / ice white	**08** titanium	**32** old-silver	**33** champagne	**34** anthracite
P8 T Temp 03 P8 T Temp/RH 03 3901F-A00110 03	P8 T Temp 01 P8 T Temp/RH 01 3901F-A00110 01	P8 T Temp 08 P8 T Temp/RH 08 3901F-A00110 08	P8 T Temp 32 P8 T Temp/RH 32 3901F-A00110 32	P8 T Temp 33 P8 T Temp/RH 33 3901F-A00110 33	P8 T Temp 34 P8 T Temp/RH 34 3901F-A00110 34

50 old silver / beech	**51** old silver / alder	**52** old silver / cherry	**08** titanium / cherry	**53** anthracite / mahogany
P8 T Temp 32 P8 T Temp/RH 32 3901F-A50110 50	P8 T Temp 32 P8 T Temp/RH 32 3901F-A50110 51	P8 T Temp 32 P8 T Temp/RH 32 3901F-A50110 52	P8 T Temp 08 P8 T Temp/RH 08 3901F-A50110 52	P8 T Temp 34 P8 T Temp/RH 34 3901F-A50110 53

P8 T CO2_Time

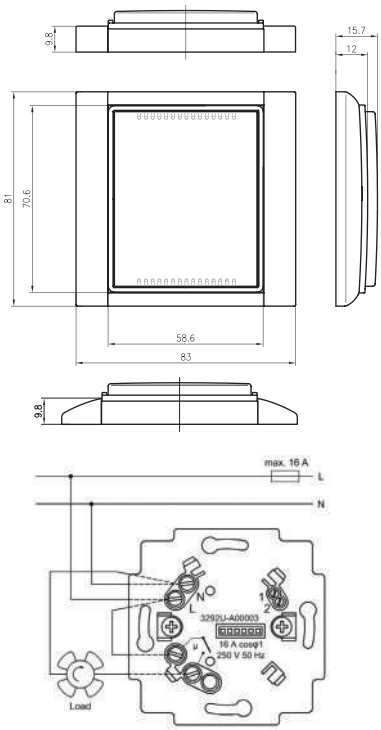
CO_2 sensor Poseidon®

easy to integrate into other systems | compatible with Poseidon® | range up to 150 m | integrated power relay

This Universal Sensor is used to measure the concetration of carbon dioxide (CO_2), temperature and relative humidity. The sensor allows three different ways of utilization.

- Gives Indication when exceeding set limits of CO_2 by optical or acoustic signalization
- Direct control technology gained by built-in relay
- Sends the measured value to the higher-level systems with the use of the wireless communication protocol and direct control Poseidon® components.
- Wireless transmission of measured values to the higher-level systems and direct control components from Poseidon® system

Power supply	230 V ±10 % 50 Hz
Protection	IP20 acc. to EN 60529
Operating temperature	0°C to +45 °C
Operating humidity	0 to 80 %RH
Accuracy of measured concentration of CO_2	±50 ppm + ±3% from value* in range 400 to 3000 ppm
Connection terminals	max. 2,5 mm²
Max. switching power	3700 W 250 VAC/750 VA cos >0,8
Operating frequency	868 MHz
Range	up to 150 m (open area)



transmitter + frame = complete transmitter

The wireless transmitters shown in figures consist of two parts, i.e. the proper transmitter functional part and the frame. These parts can be arbitrarily combined; when ordering, it is necessary to indicate the code of the switch + the code of the frame you desire.

03 white / white	**01** graphite / ice white	**08** titanium	**32** old-silver	**33** champagne	**34** anthracite
P8 T CO2 Time 03 3901F-A00110 03	P8 T CO2 Time 01 3901F-A00110 01	P8 T CO2 Time 08 3901F-A00110 08	P8 T CO2 Time 32 3901F-A00110 32	P8 T CO2 Time 33 3901F-A00110 33	P8 T CO2 Time 34 3901F-A00110 34

50 old silver / beech	**51** old silver / alder	**52** old silver / cherry	**08** titanium / cherry	**53** anthracite / mahogany
P8 T CO2 Time 32 3901F-A50110 50	P8 T CO2 Time 32 3901F-A50110 51	P8 T CO2 Time 32 3901F-A50110 52	P8 T CO2 Time 08 3901F-A50110 52	P8 T CO2 Time 34 3901F-A50110 53

P8 T Temp/RH IP

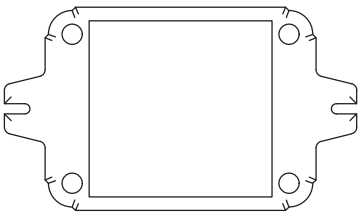
Temperature and humidity sensor Poseidon®

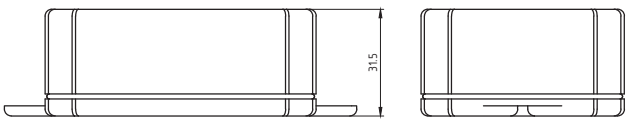
easy to install | **IP 67 protection** | easy to integrate into other systems | battery life 8 years

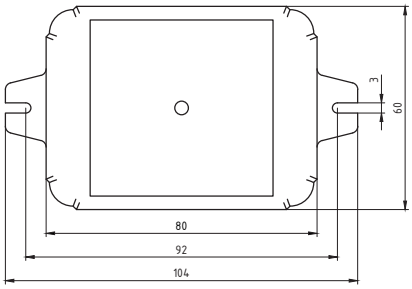
The P8 T Temp/RH IP is used to measure the temperature and relative humidity in the room and to transmit the same using wireless transmission. For the receipt and further processing, the P8 TR IP Ethernet interface is mainly used. The temperature sensor is in the plastic box with ingress protection IP 67.

The plastic box is possible to screw or stick on any suitable area.

Power supply	2× 1,5 V, lithium AA
Accuracy of temperature measuring	±0,5 K in the range 0 to 55 °C ±2 K in the range -40 to 0 °C
Accuracy of relative humidity measurement	±3 % in the range 20 to 80 % RH ±7 % in the range 0 to 20 and 80 to 100 % RH
Protection	IP67 acc. to EN 60529
Operating frequency	868 MHz
Range	up to 150 m
Weight including batteries	90 g
Operating temperature	-40 to +55 °C







P8 T Temp/RH IP

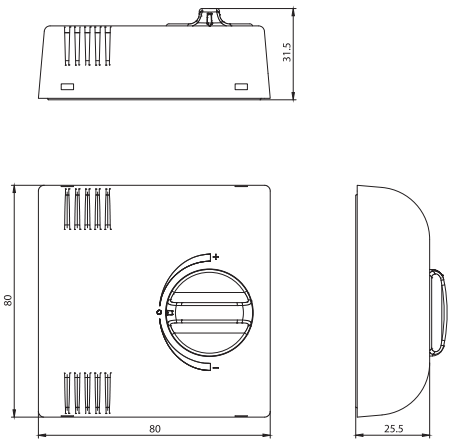
P8 T Temp/CR

Temperature transmitter Poseidon®

easy to install | range up to 150 m | battery lifetime up to 3 years | easy to integrate into other systems

The temperature transmitter Poseidon® is used to measure and transmit the temperature using the wireless transmission. For the receipt and further processing of this information, the P8 TR IP Ethernet interface is mainly used. Using the button on the transmitter, it is possible to set the transmitted value of the temperature compensation in the range of -3°C to +3°C with increments of 0,1°C.

Power supply	2× 1.5 V, alkaline AAA (LR03)
Accuracy of temperature measurement	±0.5 K in the range 0 to + 55 °C ±2 K in the range –20 to 0 °C
Interval of temperature measurement	1 minute
Protection	IP20 acc. to EN 60529
Weight including batteries	85 g
Operating temperature	–20 to +55 °C
Operating frequency	868 MHz
Range	up to 150 m (open area)

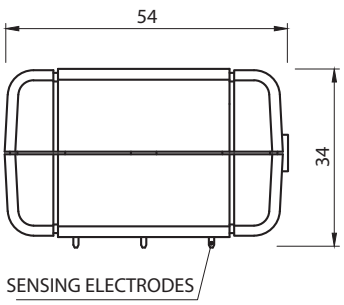


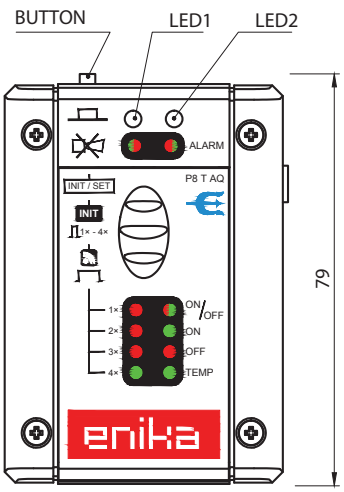
P8 T AQ
Flood and external temperature sensor Poseidon®

easy to install | range up to 150 m | optical and acoustic signalisation | battery life up to 5 years | compatible with Poseidon®

The flood detector is designed for direct installation on the floor. When the monitored area is flooded, it transmits this information. It can be used, for example, to close the water supply or to raise the alarm. The transmitter may also be equipped with an external temperature sensor.

Power supply	2× 1.5 V, alkaline AA
Number of transmitted channels	2 (flood sensor state, measured temperature)
Circuit impedance for the "flood" state	max. 4 MΩ
Circuit impedance for the "dry" state	min. 5 MΩ
Operating frequency	868 MHz
Range	up to 150 m (open area)
Weight	65 g (without batteries)
Temperature measurement range (sensor type 3299U-A90100)	-30 to +70 °C
Operating temperature	-20 to +55 °C
Accuracy of temperature measurement	±2 K in the range 0 to + 50 °C ±3 K in the range -30 to 0 and +50 to +70 °C





P8 T PS MR16/A, P8 T PSMR16/A HR

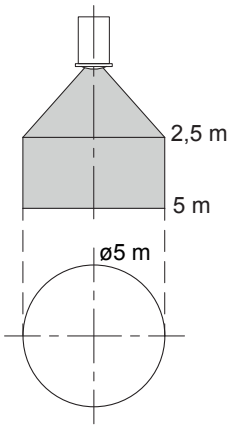
Built-in movement sensor Poseidon®

easy to install | compatible with Poseidon® | mounting height max. 8 m

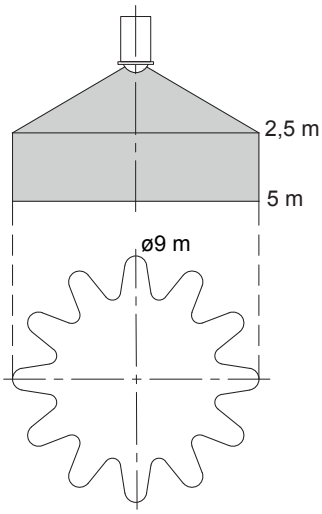
Contactless lighting controller which ensures economical, time-controlled lighting. Suitable for installation in MR16 halogen bulb holders. It is particularly well suited for mounting in suspended ceilings. Functionality is further extended by the possibility of using a tilting frame to cover the blind spots of other sensors, such as corners, niches, large halls, etc. Two variants are available with different characteristics.

Power supply	2× AA 1.5 V alkaline
Delay setting range	about 20 sec to 30 min
Range of ambient light influence	about 1 to 1 000 lx
Operating frequency	868 MHz
Range	up to 150 m (open area)
Protection	IP40 acc. to EN 60529
Operating temperature	-20 to +55 °C

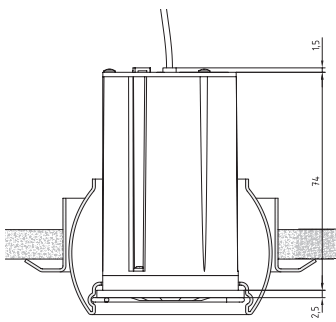
P8 T PSMR16/A



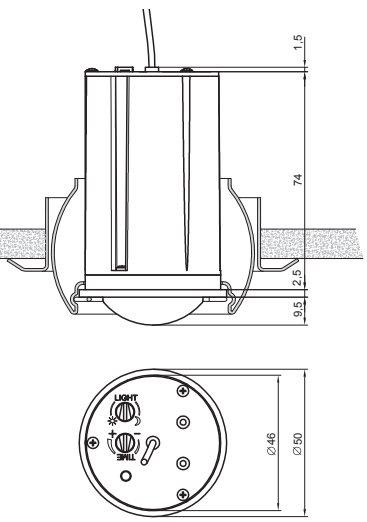
P8 T PSMR16/A HR



P8 T PSMR16/A



P8 T PSMR16/A HR



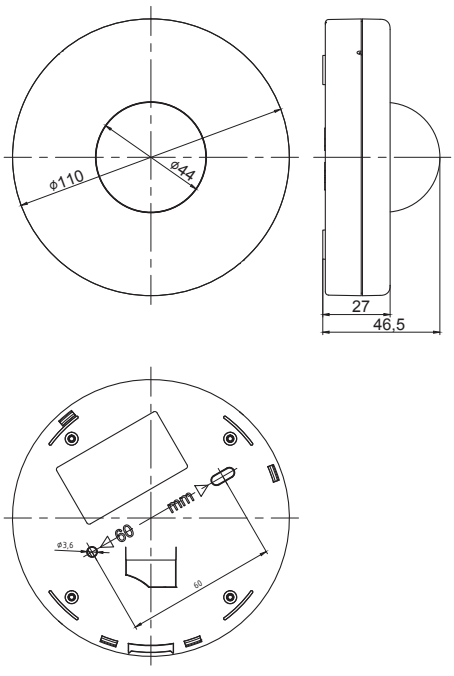
P8 T PS W

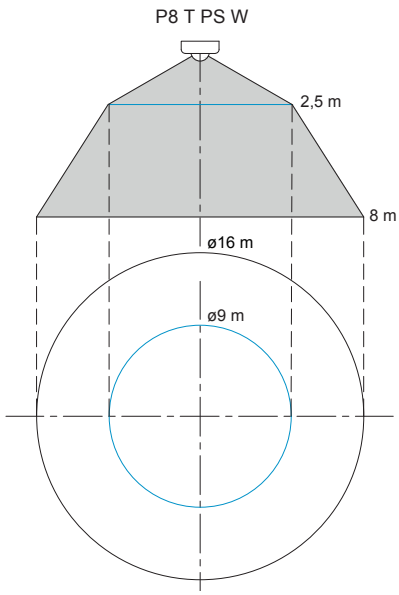
Movement sensor Poseidon® for surface mounting

easy to install | compatible with Poseidon® | mounting height max. 8 m

The movement sensor is especially suitable for the use in the interior, for mounting on a surface without any mounting holes. Thanks to its parameters, it will cover a relatively large area. So it is ideal for rooms where the lighting is to be ensured only for the necessary period when people are present in it.

Power supply	2× AA 1.5 V alkaline
Delay setting range	about 20 sec to 60 mins
Range of ambient light influence	about 1 to 1 000 lx
Operating frequency	868 MHz
Range	up to 150 m (open area)
Protection	IP40 acc. to EN 60529
Operating temperature	-20 to +55 °C
Battery life	5 years





Poseidon® Commissioning, Integration and Visualisation

ethernet | USB | visualisation | BMS integration

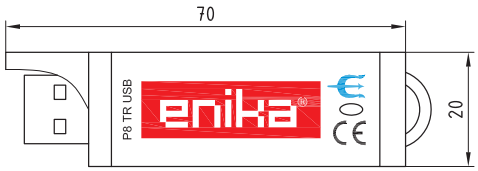
The building automation system has two basic levels of automation (control), i.e. local and central. The local control ensures an immediate response to current requirements by the users such as an adjustment of temperature, air-conditioning or an increase in the lighting intensity. The central control ensures the use of synergies of cooperation of systems and safe functioning of the building as a whole. Appropriate timing of the shading will allow a delay in the start of air-conditioning units and so save a considerable amount of energy. Damage to outdoors louvers will be avoided if they are pulled up in time when there is a strong wind. The interface represents an essential element for the integration of any system allowing linkage of the local and the central control levels. The interface for the integration of wireless system Poseidon® uses the MODBUS TCP/IP protocol and allows you to control the systems using a computer, tablet, or a mobile phone. The communications interface allows you to transfer the analogue values from wireless sensors, remote configuration of all devices of the Poseidon® system, and offers RS 485 and RS 232 serial interface.

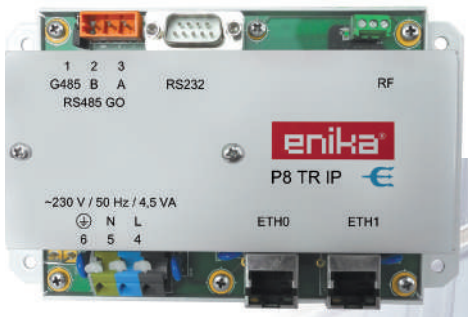
P8 TR USB

USB transmitter for the configuration of Poseidon® devices

easy system configuration | higher functionality of the equipment | easy control using software applications

Configure the system or directly control the receivers of the Poseidon® system from your PC. As a configuration option, you can "link" transmitters to receivers, and, above all, take advantage of the advanced functionality of the equipment.





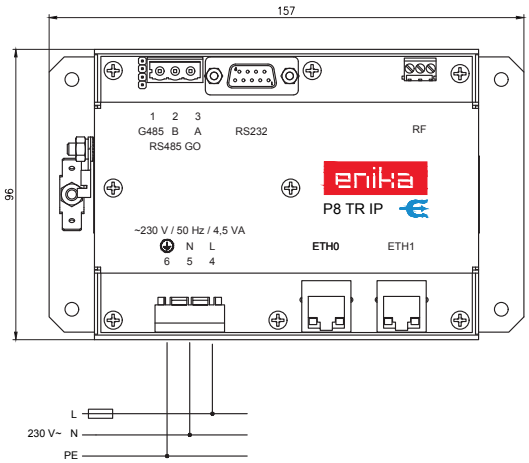
P8 TR IP

Ethernet interface Poseidon®

easy to integrate into other systems | support of MODBUS TCP/IP and RTU protocol | web server | RF signal repeater

It is used for the integration of a Poseidon® system into higher-level, e.g. building management systems (BMS) or enables control of the same using a computer, a tablet, or a mobile phone. So it is possible to directly control individual receivers, and receive the information on the state of their outputs or measured values from wireless sensors for further processing. One indisputable advantage consists of the possibility to configure the entire installation practically from anywhere using the Poseidon® Asistent software.

Power supply	230 V ±10 % 50 Hz
Ethernet interface	2× RJ 45 (switch)
Protection	IP20 acc. to EN 60529
Operating temperature	–10 to +55 °C
Baud rate	100/10 MBs
Insulation strength	300 V AC/1 min (the insulation must not be used for the isolation of hazardous voltage)
Connection terminals	max. 2.5 mm²
Operating frequency	868 MHz
Range	up to 150 m (open area)
Serial interface	RS485 (galvanic isolated) and RS232



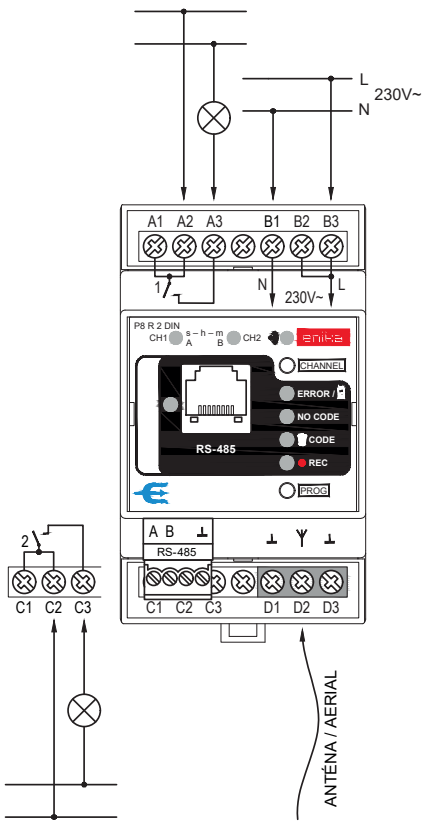
P8 R 2 DIN/DATA

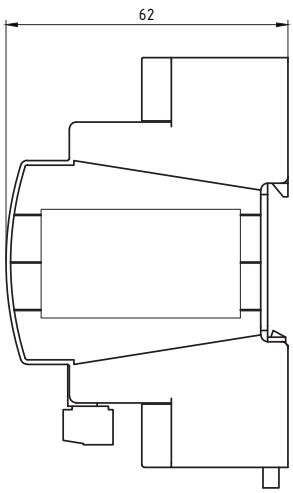
Universal 2-channel Poseidon® receiver with communication interface

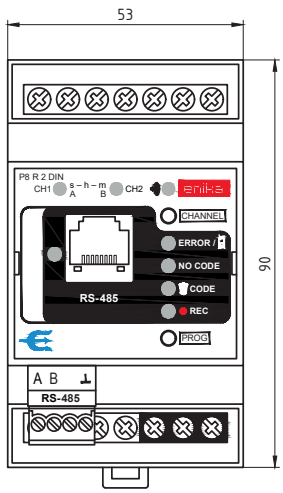
simple setup | possibility of integration into other systems | support for various protocols including Modbus RTU

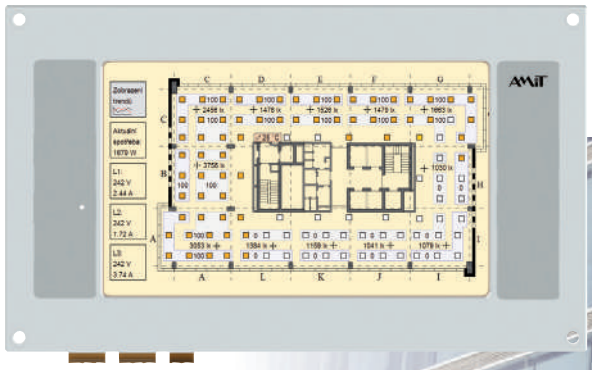
Module type receiver for simple DIN rail mounting, with two relay outputs and RS485 data interface. The output relay can be used for direct control of connected appliances. The RS485 communication protocol interface is user adjustable and includes Modbus RTU support. The receiver can be used to control AV technology, as an accessory to control systems or for remote meter reading. It can also be used as a signal repeater.

Power supply	230 V ±10 % 50 Hz
Number of channels (relays)	2
Max. switching power	2300 W (Incandescent lamps, halogen lamps)
	1750 VA (Inductive loads, electronic ballasts)
	500 VA / 64µF (fluorescent tubes)
	400 W (compact fluorescent lamps, compact LED lamps)
Serial interface	RS 485
Protection	IP 20 acc. to EN 60529
Operating temperature	-20 to +55 °C
Dimensions	3 M
Weight	100 g
Power dissipation	max. 2,5 W
Operating frequency	868 MHz
Range	up to 150 m (in open space)









AMR-OP84, AMR-OP87
Programmable control HMIs

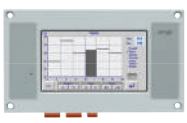
programming in DetStudio environment | control panel and control system in one | built-in web server | text and graphic displays

	Type	Display	Keys	Interface
AMR-OP84	graphic, touchscreen, 4.3"	480 × 272 pixels, 65 536 colours	-	2× RS485, Ethernet, SD, (SMS), web server
AMR-OP87	graphic, touchscreen, 7"	800 × 480 pixels, 65 536 colours	-	2× RS485, Ethernet, SD, (SMS), web server

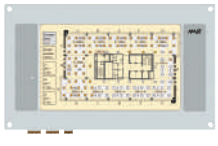
* integrated I/O: 8× DI, 8× DO, 8× AI, 2× AO

The AMR-OP87 touch panel/ programmable terminal is used together with the Poseidon Ethernet Interface P8 TR IP for lighting control in manufacturing, warehousing or logistics areas. The industrial touch panel provides high standards of use for any operator thanks to its high-performance processor and sufficient memory (2+16 MB Flash, 4 MB RAM) and features a superb 7 display with a resolution of 800 × 480 pixels. The graphic screens and control algorithms are freely programmable. It also offers a function of an internal webserver. Standard communication protocols MODBUS RTU and MODBUS TCP can be used for third party systems.

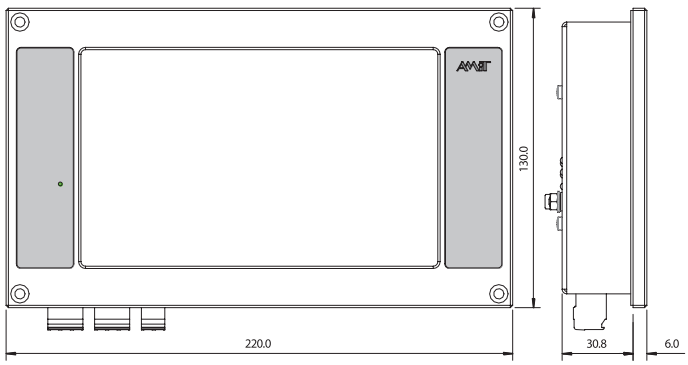
The graphic terminal is usually equipped with an Ethernet interface and two RS485 lines. The AMR-OP-87/G version also features an internal GSM modem for sending commands/reports via text messages. The terminal has been designed to be fitted onto the front panel of the switchboard with a cover protection rate of up to IP65. The operating temperature ranges between -20 and 70 °C.



AMR-OP84



AMR-OP87



Supervisory system

secured access | archiving | fault records | predefined graphic elements

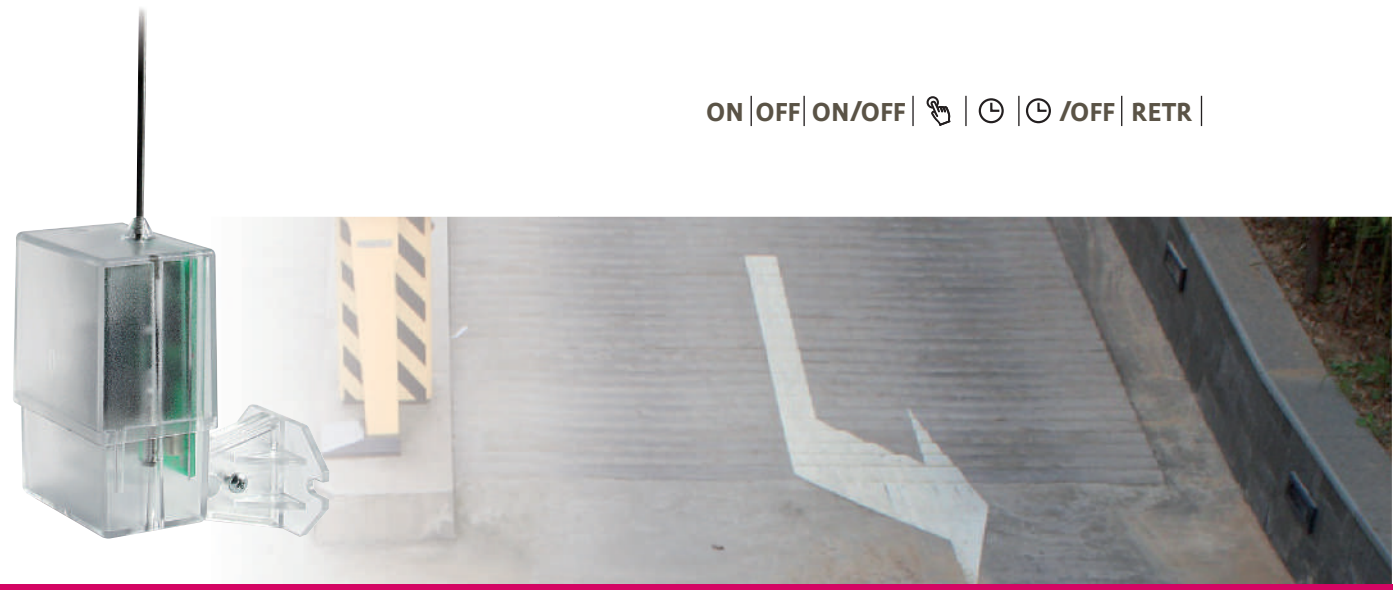
The supervisory system is a completely new control and management concept for control centers. Its principle is based on a cloud solution; the powerful program, environment parameters and measured data are located on a secured server, and the only thing the user and the administrator need to have is a common web browser running on an ordinary computer, tablet or smart mobile phone. Through strict utilisation of common and proven IT technologies we have succeeded in building a very robust and powerful visualisation system that is even suitable for large projects, both in terms of the number of connected control systems and measuring devices and in terms of the number of simultaneously connected users.

Poseidon® devices for access systems

Safe access of persons or entry of vehicles

They ensure safe access of persons or entry of vehicles into a variety of closed premises, buildings, sites or parking lots. The receivers open the gates, doors or barriers based on commands from wireless transmitters/keyrings of the Poseidon® system. For each button of the transmitter, it is also possible to set a different function for several receivers, assign time-limited access authorisation and archive all events. An indisputable advantage of these receivers rests in the possibility of remote access (using remote management).

ON | OFF | ON/OFF | | | /OFF | RETR |



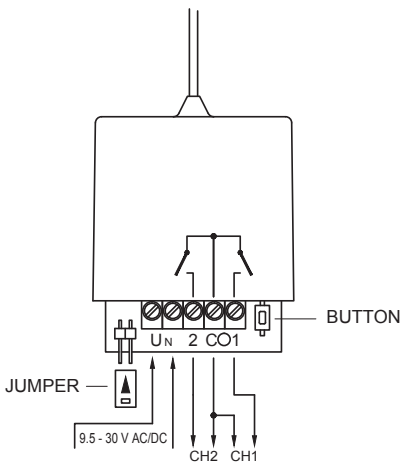
P8 R 2 Pulse

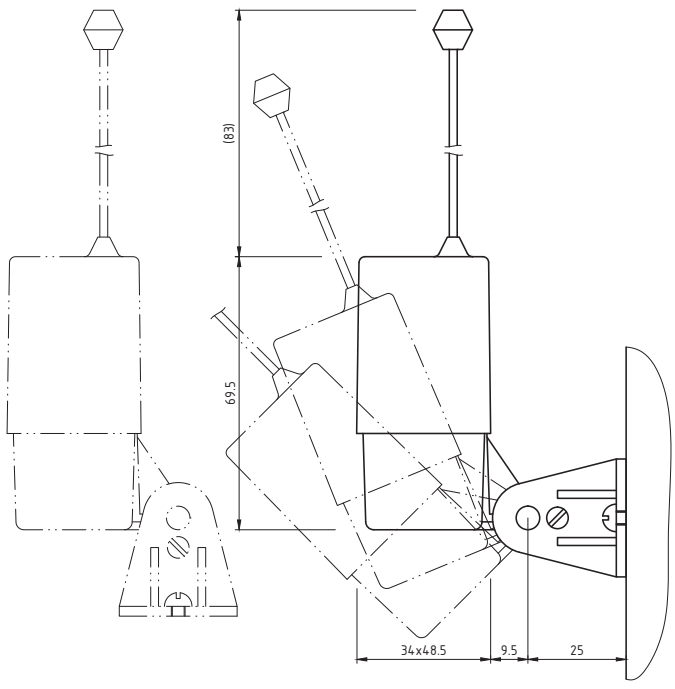
2-channel receiver Poseidon® for pulse control

easy to set | possibility of controlling using a large number of transmitters | RF signal repeater | configuration using Poseidon® software

It is used to control any control units for doors and gates made by different manufacturers. Using one controller, it is then possible to control the access gate, parking lot barrier and garage doors. It can also be used as a signal repeater.

Power supply	9.5 - 30 V AC/DC
Max. load of output contacts	max. 350 mA / 140 V / 7 W
Output pulse length	1 sec
Number of channels	2
Protection	IP33 acc. to EN 60529
Operating temperature	-30 to +70 °C
Weight	80 g
Connection terminals	screw-type, max. 1 mm^2
Operating frequency	868 MHz
Range with the supplied antenna	up to 150 m (open area)
Maximum number of codes stored in the memory	1 000





Outdoor mounting options

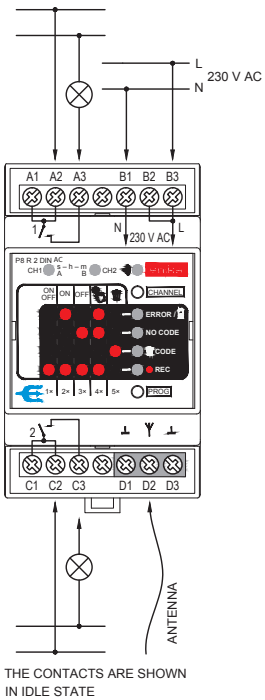
P8 R 2 DIN AC

2-channel receiver for access systems Poseidon®

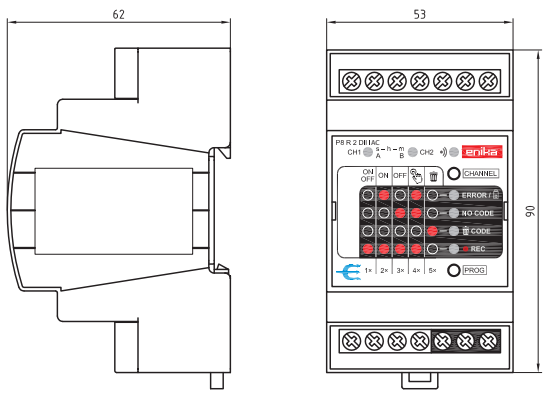
easy to set | possibility of controlling using a large number of transmitters | possibility of connecting an external antenna | RF signal repeater

A module type receiver for easy installation in switchboards with two output channels that can be used for direct control of entry doors or barriers. It has an extended memory for up to 1 000 transmitters; therefore, it can be used for control of points of arrival in reserved parking lots of large companies, government buildings, hospitals, and residential buildings.
It can also be used as a signal repeater.

	P8 R 2 DIN AC	P8 R 2 DIN AC>24V
Power supply	230 V ±10 % 50 Hz	24 V~= ±20 %
Max. switching power	2 300 W conventional bulbs	
	1 750 VA electronic multipliers, halogen bulbs with transformer	
	500 VA/64 µF fluorescent light fittings	
Number of channels	2	
Protection	IP20 acc. to EN 60529	
Operating temperature	-20 to +55 °C	
Output protection	external (max. 16 A)	
Dimensions	3 M	
Weight	100 g	
Connection terminals	screw-type, max. 4 mm²	
Operating frequency	868 MHz	
Range with the supplied antenna	up to 300 m (open area)	
Maximum number of codes stored in the memory	1 000	



THE CONTACTS ARE SHOWN IN IDLE STATE



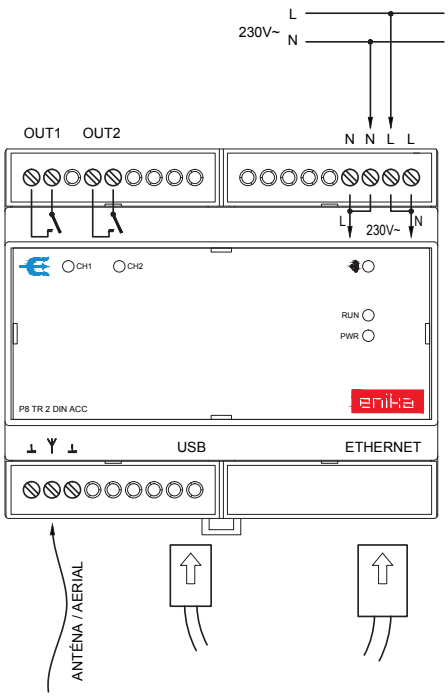
P8 TR 2 DIN ACC

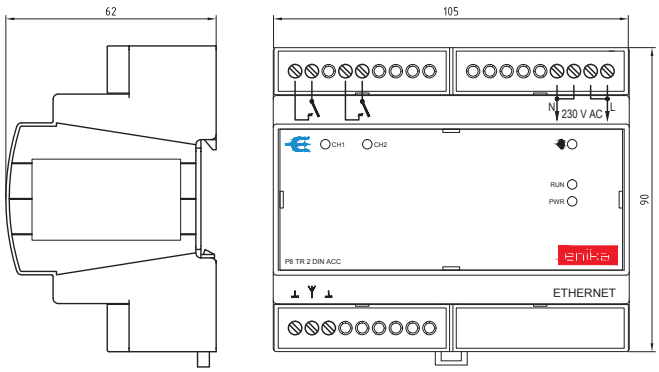
Receiver for access systems Poseidon®

for mounting on a DIN rail | ethernet interface | web server | compatible with Poseidon®

A module type receiver for easy installation in switchboards with two output channels that can be used for direct control of entry doors or barriers. It is also equipped with an Ethernet interface which, together with an integrated web server, provides for remote access for parametrisation. You can create user groups, define a time-limited access, while the archiving of individual events is a commonplace.

Power supply	230 V ±10 % 50 Hz
Max. switching power	max. 1 A / 230 V
Switching element	relay
Number of channels	2
Protection	IP20 acc. to EN 60529
Operating temperature	-20 to +55°C
Dimensions	6 M
Connection terminals	screw-type, max. 2.5 mm^2
Operating frequency	868 MHz
Range with the supplied antenna	up to 200 m (open area)
Ethernet interface	1× RJ 45
Baud rate	100/10 MBs





POSEIDON® Accessories

Antennas and extension cables Poseidon®

use in case of problems with the range | use in case of a long distance between the transmitter and the receiver

If there are problems with the range or when a great distance exists between the transmitter and the receiver, it is possible to use external antennas. They are supplied with a 2 m cable with an SMA connector and an adapter for the connection to the device.

P8 A EXT2

It is ideal for ensuring the required range, especially for P8 TR 2C/U DIN transmitters of input information. It enables an increase in the range up to a distance of 3 km if there is a direct line of sight between antennas. The antenna only propagates/captures the signal in a narrow corridor; so it must be oriented towards the transmitter/receiver, or transmitting/receiving antenna (horizontal polarisation). It is supplied with a 5 m cable with an SMA connector and an adapter for the connection to the device. If the antenna needs to be installed at a greater distance from the transmitter/receiver, a 5 m or 10 m extension cable may be used.

If the antenna needs to be installed at a greater distance from the transmitter/receiver, an extension cable may be used.

Antenna indoor

P8 A INT1

Antenna indoor

P8 A INT2

Antenna outdoor

P8 A EXT1

Antenna outdoor omnidirectional

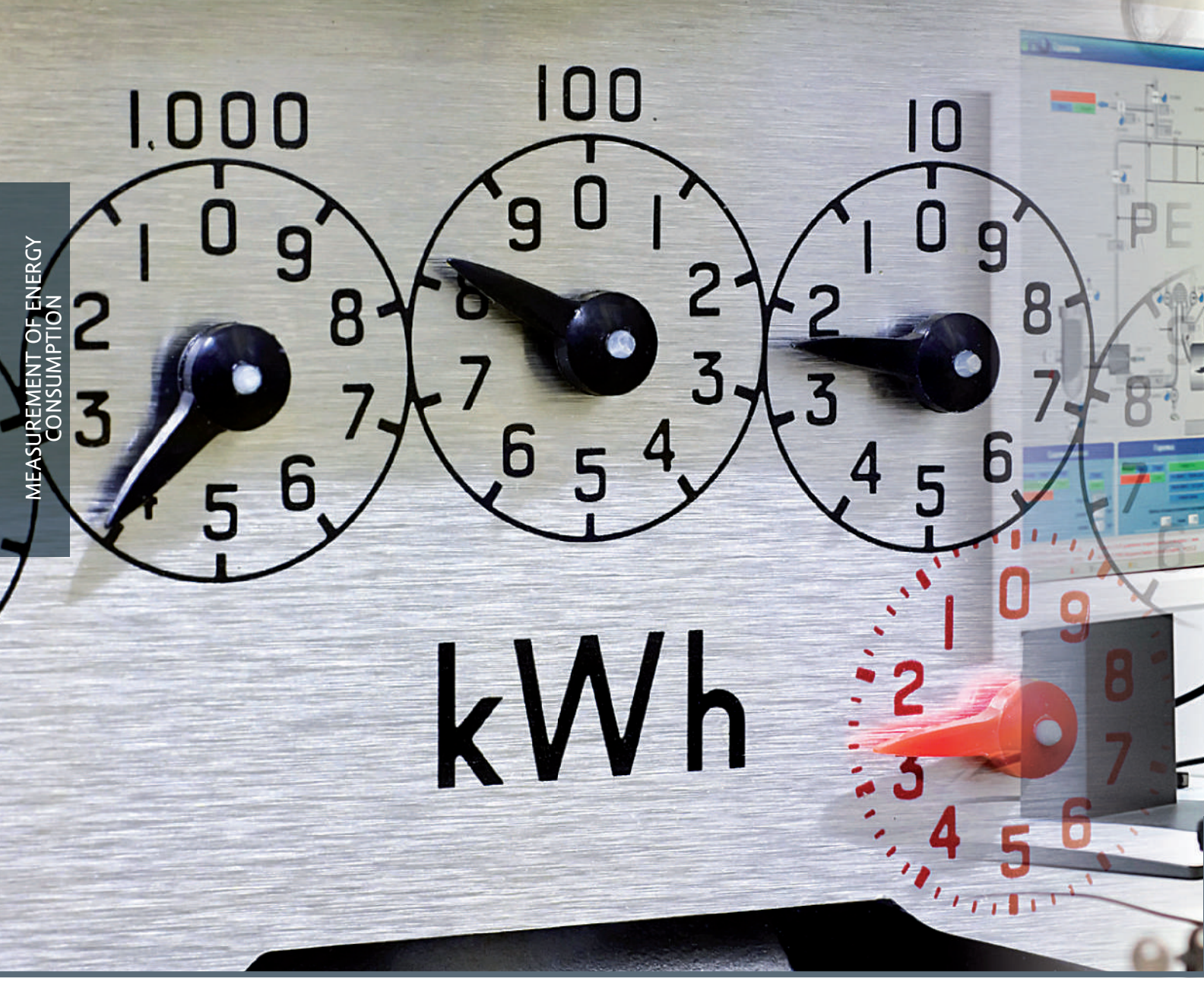
P8 A EXT2

Cable 5 m

P8 A CA5

Cable 10 m

P8 A CA10


1.000
100
10
kWh

Measurement of energy consumption

Continuous information on energy consumption

three-phase energy meters | single-phase energy meters

The instruments for measuring the consumption of electrical energy, i.e. energy meters, represent much sought-after equipment and also provide, along with the basic consumption measurements, comprehensive measurements of mains parameters, as well as calculations of average values on a continuous basis. The energy meters are designed for measuring single-phase, two-phase or three-phase AC distribution systems and are supplied in an officially certified version (for billing) and also in version intended for analytical or internal measurements (submetering). In order to enable the remote transmission of data, and its central processing and visualisation through selected interfaces, the energy meters are equipped with communications ports. Keep your energy under control – maximise the savings by using an effective tool for the monitoring, analysing and planning of the consumption of electric energy for your business.

Keep the energy under control - Maximise your savings!

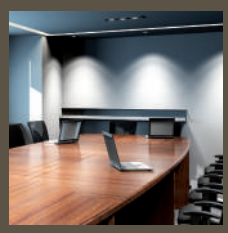
Nowadays modern instruments for the measurement of electric energy consumption are multifunctional and multipurpose meters that can provide not only information about consumption, but are also able to monitor all network parameters in detail and identify problems with the powering of individual equipment, the start of failures or threat of overload of the power supply line. In order to select the most appropriate instrument for the required purpose, it is necessary to know some basic information:

AMP RATING

Most devices used for direct measurement have a maximum rating of 3× 65 A. Should this value be exceeded, a device with indirect measurement equipped with external current transformers must be used; in order to select the right device, it is necessary to know the amp rating and wire diameter, on which the transformer will be applied.

INSTALLATION METHOD

Meters are installed a versatile carrier for most elements of the newly completed switchboards. If frequent access to
the instrument display or to its controls is needed, some instruments are prepared for the installation in a panel hole.



BILLING MEASUREMENT OR SUBMETERING

The energy meters are delivered with various calibration certificates. If an instrument which data are to be used for financial transactions is required, it will be necessary to use such an instrument as has been verified by an authorised testing laboratory, generally in accordance with the new directive of the European Union 2004/22/EC on measuring instruments (referred to as MID). If the measurements are required only for own purposes and monitoring of the consumption, it will not be necessary to use any billing measurement instrument; it will be possible to use an energy meter without such certificate.

COMMUNICATIONS INTERFACE INPUTS AND OUTPUTS

of electronic energy meters uses an output communication port that can be used for remote transmission of the measured data. The RS485 serial port for industrial applications is used as a basic port; alternatively, an Ethernet port can be used directly for the transmission of data via a common data network.

The basic design offers pulse outputs S0 which transmit information about the active or reactive energy consumption (kWh, kvarh). In addition the instrument can have digital outputs that enable to change over multiple tariff counters or can be used as inputs for pulse signals from flow meters of water, gas, heating fluid or from any other energy meter.

VMU-C EM

Integrated modular system to monitor conventional energy

integrated system | integrated Software | fast, easy and free updates | communication flexibility | compact size

- Micro-PC with web server
- Adaptive database according to connected meters (up to 32 3-phase meters or 45 1-phase meters)
- Managed variables: DC and AC electrical variables (kWh, kvarh, kW, kvar, kVA, V, A), THD, PF
- Other managed data: analogue variables, digital inputs/outputs, utility meters and totalizers
- Local storage of system data and event for up to 30 years
- Backup on external devices
- Communication ports: RS485 Modbus RTU, Ethernet, local bus, mini-USB
- Supported protocols: FTP, DP(Data Push), HTTP, Modbus TCP/IP, SMTP
- Friendly user interface accessible via standard web browser
- Free integrated software updates, easy to download and install via web interface
- 2-DIN size

VMU-C EM is the main VMU-C EM system module. It is a micro PC pre-installed with a web server with pages viewable via browser. It monitors the system, recording and transmitting energy meters data. It communicates via various communication protocols (FTP, HTTP, Modbus TCP/IP) in wired connection. If connected to the modem module (VMU-D module) it also communicates via wireless 3G mobile network. If set in the system, it controls modules to manage analog variables (VMU-P) and digital inputs and outputs (VMU-O). Control can be direct via local bus or indirect via Modbus RTU serial communication with the VMU-M EM module.

Name	Description
VMU-C EM	Main module made up of a micro PC pre-installed with a web server. Communicates via various communication protocols. Monitors and records information and alarms. Transmits data supplied from energy meters and VMU-O EM and VMU-P EM accessory modules. One VMU-C EM module per system.
VMU-M EM	Accessory module that controls VMU-O EM and VMU-P EM modules. Records and manages data provided by the modules. Maximum 10 VMU-M EM modules per system.
VMU-O EM	Accessory module for digital inputs and outputs. Maximum 33 VMU-O EM modules per system.
VMU-P EM	Accessory module for analog inputs. Maximum 11 VMU-P EM modules per system.
VMU-D	Accessory module for mobile wireless transmission. One VMU-D module per system.

EM330 DIN

Simple three-phase energy meter mounted on a DIN rail (3M)

energy meter: kWh + kvarh | digital input | certified according to MID Directive | LCD display

Three-phase energy meter with backlit LCD display with integrated touch keypad. Particularly indicated for active energy metering and for cost allocation (CT connection), with dual tariff management availability. It can measure imported and exported energy or be programmed to consider only the imported one. Housing

for DIN-rail mounting, with IP51 front degree protection. The meter is optionally provided with pulse output proportional to the active energy being measured, RS485 Modbus port or M-bus port. Available for legal metrology (PF option, only for imported energy).

ordering code	pulse output S0	RS485 Modbus	M-BUS
EM330DIN-AV53H-O1X	•		
EM330DIN-AV53H-S1X		•	
EM330DIN-AV53H-M1X			•
EM330DIN-AV53L-O1X	•		
EM330DIN-AV53L-S1X		•	
EM330DIN-AV53L-M1X			•

- Three phase energy meter
- Class 1 (kWh) according to EN62053-21
- Class B (kWh) according to EN50470-3
- Accuracy ±0.5% RDG (current/voltage)
- Current measurement via CT
- Backlit LCD display (3x 8-digit) with integrated touch key-pad
- Energy readout on display: 8 digit
- Variable readout on display: 4 digit
- Energy measurement: kWh and kvarh (imported/exported); kWh+ by 2 tariffs; kWh per phase
- System variables: kW, kvar, kVA, VLL, VLN, PF, Hz, kWdmd, kWdmd peak
- Phase variables: kW, kvar, kVA, VLL, VLN, A, PF
- Auxiliary power supply
- Dimensions: 3-DIN module
- Protection degree (front): IP51
- Pulse output (optional, by open collector PNP)
- RS485 Modbus port (optional)
- M-bus port (optional)
- Run hour meter
- Neutral current calculation

EM340 DIN

Simple three-phase energy meter mounted on a DIN rail (3M)

energy meter: kWh + kvarh | digital input | certified according to MID Directive | LCD display

Three-phase energy meter with backlit LCD display with integrated touch keypad.

Particularly indicated for active energy metering and for cost allocation in applications up to 65 A (direct connection), with dual tariff management availability.

It can measure imported and exported energy or be programmed to consider only the imported one. Housing for DIN-rail mounting, with IP51 front degree protection. The meter is optionally provided with pulse output proportional to the active energy being measured, RS485 Modbus port or M-bus port.

Available for legal metrology (PF option, only for imported energy).

ordering code	pulse output S0	RS485 Modbus	M-BUS
ET340DIN-AV23X-S1X			•

- Three phase energy meter
- Class 1 (kWh) according to EN62053-21
- Class B (kWh) according to EN50470-3
- Accuracy ±0.5% RDG (current/voltage)
- Direct current measurement up to 65AAC
- Backlit LCD display (3x 8-digit) with integrated touch key-pad
- Energy readout on display: 8 digit
- Variable readout on display: 4 digit
- Energy measurement: kWh and kvarh (imported/exported); kWh+ by 2 tariffs; kWh per phase
- System variables: kW, kvar, kVA, VLL, VLN, PF, Hz, kWdmd, kWdmd peak
- Phase variables: kW, kvar, kVA, VLL, VLN, A, PF
- Self power supply
- Dimensions: 3-DIN module
- Protection degree (front): IP51
- Pulse output (optional, by open collector NPN)
- RS485 Modbus port (optional)
- M-bus port (optional)

WM40 96

With detailed measurements of network parameters and additional functions

energy meter with a higher accuracy (0.5 % kWh) in a box which can be mounted in a 96 × 96 mm panel, with extended functionality

Thanks to its modular design, the energy meter can be easily adapted to the required application. The inputs for current measurements are prepared for the use of standard external current transformers with an output 5 A. The device uses the TRMS advanced method, so it is even able to correctly measure distorted waveforms of voltage and current. It is equipped with an LCD display with colour backlight. From one to three optional auxiliary modules can be connected to the basic unit to ensure the functions of inputs, outputs, data recording and communication. The meter is only suitable for submetering.

- energy meter: +kWh, +kvarh, -kWh, -kvarh
- 4 individual counters kWh, kvarh, 4 tariffs
- higher accuracy class 0.5 % kWh (0.2 % V/A)
- real time clock, operating hours
- overall measurements: W, var, VA, V, A, PF, Hz,
- individual phases: W, var, VA, V, A, An, PF
- asymmetry, rotation and loss of phase
- all minimum and maximum values, average values
- distortion V/A up to 32nd harmonic
- 8× output (pulses, alarms, control), 6× relay output, 6× digital input (tariff, pulses, synchronization), 4× analogue output (20 mA, 10 V)
- 16× alarm AND/OR
- datalogger for 10 000 records
- BACnet-IP (BACnet-MS/TP) port
- size: 96 × 96 mm
- LCD graphic backlit display

ordering code	description
WM40 AV53H	WM40 96 base + power supply 90 - 260 VAC/DC
WM40 AV53L	WM40 96 base + power supply 21 - 60 VAC/DC

Possible combinations of auxiliary modules:

ordering code	description	pos. A	pos. B	pos. C
MOR2	2× relay output	•		
MOO2	2× output opto-mosfet	•		
MOA2	2× analog output 20 mA	•	•	
MOV2	2× analog output 10 V	•	•	
MFI6R4	6× input, 4× relay		•	
MFI606	6× input, 6× output		•	
MC485232	RS485/232 communication			•
MC485232M	RS485/232 communication + memory			•
MCETH	Ethernet port			•
MCETHM	Ethernet port + memory			•
MCBACIP	BACnet-IP port			•
MCBACIPM	BACnet-IP port + memory			•
MCBACMS	BACnet-MS/TP port			•
MCBACMSM	BACnet MS/TP port + memory			•
MATP	1× input temperature + 1× input 20 mA		•	
MATPN	1× measurement N current + 1× input temperature + 1× input 20 mA		•	

EM24 DIN

Three-phase energy meter with a detailed measurement of mains parameters

energy meter: kWh + kvarh | overall measurement: W, var | individual phases: A | phase rotation indication | LCD display

The meter has inputs for current measurements designed for direct measurement up to 65 A; its version for indirect measurements enables connection of standard external current transformers with an output of 5 A. The meter uses the TRMS advanced method, so it is even able to correctly measure distorted waveforms of voltage and current. It is equipped with a three-line LCD display without backlight. The outputs can be provided either as pulses S0, alarms or via RS485 Modbus communication port. The inputs can be provided as pulses (registration of consumption of water, gas, etc.) and used for tariff changeover, or for reading.

Versions for submetering or verified for billing are available.

It is possible to mount the meters into panels using the "4DIN96 Adapter" kit.

- energy meter: + kWh, kvarh +, kWh, kvarh-, (3×1 F kWh)
- individual counters kWh, kvarh, up to 4 tariffs, operating hours
- overall measurements: W, var, VA, in, PF, Hz
- time period 1-30 min: Amax, VA, VAmax, W, Wmax
- individual phases: V, A, VA, W, var, PF
- indication of phase rotation
- 3× input for external measurement of consumption of water, gas, heating fluids, kWh
- 2× output – pulses, alarms
- size: 4 DIN
- LCD display

Table of ordering codes (direct measurement 65 A):

ordering code	billing meter	pulse output S0	relay output	RS485	bidirectional measurement
EM24DIN AV93X XXPFA	•				•
EM24DIN AV93X XXPFB	•				
EM24DIN AV93X O2PFA	•	•			•
EM24DIN AV93X O2PFB	•	•			
EM24DIN AV93X ISPFA	•			•	•
EM24DIN AV93X ISPFB	•			•	
EM24DIN AV93X XXX					
EM24DIN AV93X O2X		•			
EM24DIN AV93X ISX				•	
EM24DIN AV93X R2X			•		

Table of ordering codes (indirect measurement 5 A):

ordering code	billing meter	pulse output S0	relay output	RS485	bidirectional measurement	power supply 18-60 V
EM24DIN AV53D XXPFA	•				•	
EM24DIN AV53D XXPFB	•					
EM24DIN AV53D O2PFA	•	•			•	
EM24DIN AV53D O2PFB	•	•				
EM24DIN AV53D ISPFA	•			•	•	
EM24DIN AV53D ISPFB	•			•		
EM24DIN AV53D XXX						
EM24DIN AV53D O2X		•				
EM24DIN AV53D ISX				•		
EM24DIN AV53D R2X			•			
EM24DIN AV53L O2X		•				•
EM24DIN AV53L ISX				•		•

EM111 DIN

Single-phase energy meter with extended functionality

energy meter: ±kWh, ±kvarh | size 1 DIN | LCD display with backlight

Single-phase electronic energy meter in small case to be mounted on a DIN rail (1 module), with more detailed measurement of network parameters and extended functions. The inputs for current measurement are prepared for direct measurements up to 45 A. The user can choose the method of measurement of the direction of energy flow, when both directions are registered by the shared counter, or when a separate counter is used for each directions. It is also possible to perform measurements with two tariffs to be switched using the status on the control input.

The energy meter is equipped with a single-line backlit LCD display. The output can be in the form of a pulse S0 (kWh), or data in case of RS485 Modbus or M-BUS versions. The available versions are intended for submetering, the versions for billing measurement are currently subject to approval procedure.

ordering code	pulse output S0	RS485 Modbus	M-BUS
EM111-DINAV81-X O1X	•		
EM111-DINAV81-X S1X		•	
EM111-DINAV81-X M1X			•

- electric meter: ±kWh, ±kvarh
- two tariffs switched with contact
- adjustable measurement mode A = only consumption, B = consumption and supply separately
- measurement: V, A, W, Wdmd, Wdmd max, var, Hz, PF
- size: 1 DIN
- LCD display with backlight
- control using touch sensors
- RS485 Modbus or M-BUS communication

Attenuation of the signal when passing through given materials

Wooden structures, gypsum boards, drywall, OSB	5 - 15 %
Brick wall	10 - 40 %
Glazed surfaces with regular glass	10 - 30 %
Reinforced concrete structures	50 - 80 %
Steel and all-metal structures and surfaces	80 - 100 %

Signal attenuation is just approximate. The real range will depend on the number of obstacles, moisture of the material through which the signal passes, and local interference from other sources, if any.

Data subject to change.

Explanatory notes the Poseidon®

Switching receivers

FUNCTION ON

Whenever the transmitter pushbutton is pressed, the receiver relay is closed and remains closed.

FUNCTION OFF

Whenever the transmitter is pressed, the receiver relay is opened and remains opened.

FUNCTION ON/OFF

Single-pushbutton mode

Pressing of the transmitter pushbutton will alternately close and open the receiver relay.

Two-pushbutton mode

Whenever the upper pushbutton of the transmitter is pressed, the receiver relay is closed. Whenever the lower pushbutton of the transmitter is pressed, the receiver relay is opened.

FUNCTION PUSH

The receiver relay will remain closed until the transmitter is released.

FUNCTION TIMER

After the transmitter pushbutton is pressed, the receiver relay is closed for a preset period of time (1 sec to 8 hrs). Any other pressing of the transmitter pushbutton will reset the time.

/OFF FUNCTION TIMER /OFF

Single-pushbutton mode

If the receiver relay is opened, it will be closed for a preset period of time (1 sec to 8 hrs) once the transmitter pushbutton is pressed. If the relay is closed, it will be opened.

Two-pushbutton mode

Once the upper pushbutton of the transmitter is pressed, the receiver relay will be closed for a preset period of time (1 sec to 8 hrs). Whenever the lower pushbutton of the transmitter is pressed, the receiver relay is opened.

RETR FUNCTION RETR

This function is only used to send the code of the programmed transmitter pushbutton when the range of instruments is insufficient. It does not affect the state of the relay. Min. distance between the instruments shall be 2 m!

Roller shutter receivers

JAL FUNCTION LOUVER (two- or three-pushbutton mode of control)

A long press of the transmitter pushbutton (>0.5 sec) will close the output relay (3 min), i.e. it will get moved to the end position. A short press of the transmitter pushbutton is used for louver positioning. The upper (left) pushbutton is used to control the output relay for opening, while the lower (right) pushbutton is used to control the output relay for closing. It is also possible to use the three-pushbutton mode of control; whenever the third pushbutton is pressed, the louver will stop.

ROLL FUNCTION ROLLER SHUTTER (single-, two- or three-pushbutton mode of control)

A short press of the transmitter pushbutton will close the output relay (3 min), i.e. it will be moved to the end position. A repeated short press of the transmitter pushbutton will open the relay (stop). A long press (>0.5 sec) of the pushbutton will close the output relay (travel) only for the time of its holding. The upper (left) pushbutton is used to control the output relay for opening, while the lower (right) pushbutton is used to control the output relay for closing. It is also possible to use the three-pushbutton mode of control; whenever the third pushbutton is pressed, the roller shutter will stop.

CO FUNCTION CENTRAL OPEN

A short press of the transmitter pushbutton = travel to the end position "open". It is not possible to stop travel by repeated pressing of the pushbutton.

CC FUNCTION CENTRAL CLOSE

A short press of the transmitter pushbutton = travel to the end position ´closed´. It is not possible to stop travel by repeated pressing of the pushbutton.

STOP FUNCTION STOP

When the transmitter pushbutton is pressed, the closed output relay will be opened. For functions programmed in three-pushbutton mode, this function will be automatically assigned to the lower pushbutton (pushbuttons) and will be activated by simultaneous pressing of opening and closing pushbuttons.

POS FUNCTION POSITION

The relay will be closed for such a period of time as allows the louver to reach the position corresponding to the value of 0-100% (provided that time constants of the louvers have been set properly).

Receivers with analogue output P8 R 01-10 N and receivers with DALI output P8 R DALI N

DIMM FUNCTION DIMMER

Single-pushbutton mode

A short press of the transmitter pushbutton will close the output relay and alternately change the output signal from min. to max. and vice versa. A long press of the transmitter pushbutton will result in gradual rise/drop of the output signal.

Two-pushbutton mode

A short press of the upper (left) transmitter pushbutton will close the output relay and set the max. value of the output signal. A short press of the lower (right) transmitter pushbutton will open the output relay and set the min. value of the output signal.

A long press of the upper (left) transmitter pushbutton will close the output relay, and the output signal will gradually rise. A long press of the lower (right) transmitter pushbutton will open the output relay, and the output signal will gradually drop.

FUNCTION ON

Whenever the transmitter pushbutton is pressed, the receiver relay will be closed and remain closed. The output signal will be set to the maximum value.

FUNCTION OFF

Whenever the transmitter pushbutton is pressed, the receiver relay will get switched off and remain off. The output signal will be set to the minimum value

FUNCTION ON/OFF

Single-pushbutton mode

The pressing of the transmitter pushbutton will close and open the receiver relay alternately.

Two-pushbutton mode

When the upper pushbutton of the transmitter is pressed, the receiver relay will get closed. Whenever the lower pushbutton of the transmitter is pressed, the receiver relay is opened.

FUNCTION TIMER

After the transmitter pushbutton is pressed, the output relay will get closed and the value of the output signal will be set to the maximum value for a preset period of time (1 sec to 8 hrs). Any other pressing of the transmitter pushbutton will reset the time.

/OFF FUNCTION TIMER /OFF

Single-pushbutton mode

If the receiver relay is open, it will be closed once the transmitter pushbutton is pressed, and the value of the output signal will be set to maximum for a preset period of time (1 sec to 8 hrs). If the relay closed, the output signal will be set to the minimum value and the relay will open.

Two-pushbutton mode

A short press of the upper transmitter pushbutton will close the output relay, and the value of the output signal will be set to its maximum for a preset period of time (1 sec to 8 hrs). Any other pressing of the transmitter pushbutton will reset the time.

A short press of the lower transmitter pushbutton will set the output signal to its minimum value, and the relay will be opened.

FUNCTION LEVEL

This function is used to set the required value of the control signal for switching on (functions DIMM, ON and TIMER) for the given transmitter.

DIR FUNCTION DIRECT

Output will be set to a received value of 0-100 %.

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