

ParkGard® Evaluating Unit PA-Z1 and PA-S1 via RS-485 Bus

Description

Measuring and controlling module for detecting the presence of vehicles and counting them, and for monitoring gates.

The evaluating unit PA is able to control up to four magnetic field sensors of the PM-01 series via the RS-485 bus. Five relays with potential-free change-over contacts are available for controlling gate systems or for counting vehicles.

The PA module is equipped with self-monitoring function, power-fail message as well as with function control of the registered PM-01.

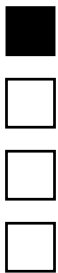
The serial interface enables application parameters to be loaded and stored.



PA module without display



PA module with display



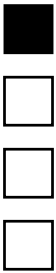
Application

The evaluating unit PA-S1 is used for detecting the presence of vehicles and for activating gate and barrier control systems.

The evaluating unit PA-Z1 is used for counting vehicles in car lanes.

Features

- Up to four magnetic field sensors connectable via RS485 bus
- Four relays with change-over contact, potential-free max. 250 VAC; 5 A
- Fault relay with change-over contact, potential-free max. 250 VAC; 5 A
- Only one device necessary for entry and exit control gates (4-channel device)
- Simple and fast commissioning by configuration with standard parameters
- Easy installation
- No milling of the lane necessary
- Subsequent installation possible
- No problems caused by sun or low temperature
- Flexible configuration by programmable parameters and setpoints
- Microcontroller controlled
- Automatic adjustment of the magnetic field sensors at switch-on or reset
- Recognition of the driving direction
- The following settings are adjustable via code switches:
 1. Sensitivity of the channels
 2. Hold time 5 minutes / Hold time unlimited (for PA-S1)
 3. Detection of presence / Recognition of direction (for PA-S1)
 4. Relay as permanent signal or for pulse signal (for PA-S1)
- Suitable for DIN rail mounting (electric distribution enclosure)
- Serial interface
- Door mounting (optional)
- Plastic housing IP 54 (optional)



Specifications

Electrical	
Power supply	24 VAC/DC -10% + 20% optional 230VAC
Power consumption	5 W, 200 mA
Relays (4)	250 VAC, 5 A, potential-free, change-over contact
Fault relay (1)	250 VAC, 5 A, potential-free, change-over contact
Interface	
Transceiver	RS 485 / 19200 Baud
Mounting distance of the sensors	
Lateral installation	Mounting height 40 – 70cm Distance car to sensor 30 – 150cm
Installation above the vehicle	Mounting height 220 – 250cm Installation in the middle of the lane
Visualization	
Status LED	Yellow = alarm status; red = fault
Environmental conditions	
Humidity	15 – 95 % RH non-condensing
Working temperature	-10 °C to + 50 °C
Storage temperature	0 °C to + 50 °C
Physical characteristics	
Enclosure	Plastic housing ABS
Colour	RAL 7035
Protection class	IP 40
Weight	0,3 kg
Mounting	DIN rail, distribution enclosure
Wire connection	Power supply Relay Input
	Screw type terminal: 2,5 mm ² 2 x spring type: min. 0,5, max. 1,5 mm ² Spring type: min. 0,5, max. 1,5 mm ²
Dimensions	(W x H x D) 104 x 86 x 56 mm
Cutting out for door mounting	(W x H) 134 x 125 mm
Guidelines	
	EMC Directive 89/336/EEC; Low Voltage Directive 73/23/EEC
Warranty	2 years



Ordering Information

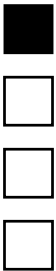
PA-X1-00000

Options

2XXXX	2-channel
4XXXX	4-channel
X1XXX	24V AC/DC
X2XXX	230V AC
XX1XX	DIN rail mounting
XX2XX	Door mounting
XX3XX	Plastic housing for surface mounting
XXX1X	With display
XXXX1	With EPS

Options

S	Gate module
Z	Counting module



Example: PA Gate module, 2-channel, 24V, DIN rail mounting

Ordering number: **PA-S1-11100**