

PCU-230 System Component for Passenger Counting



Features

Passenger Counting

P1. 1.10.6

- Counting at up to 6 vehicle doors
- Maximum of 16 DILAX counting sensors connectable
- Connection of door contacts
- Sensor diagnostics

Counting Data Management

P1. 1.10.6.1.1

- Administration of the counting data
- Acceptance of counting data from other DILAX counting units
- Assignment of counting data to the vehicle's geographic position, date and time
- Identifying of the counting data with the respective system status
- Internal data storage

Data Transfer

- Automatic transfer of counting data by internal communication module (GSM/GPRS or WLAN)
- Transfer of counting data (time-based, station-specific or day-specific)

System Management

P1. 1.10.6.1.1

- Processing of the vehicle signals (e.g. vehicle moving, release doors, shutdown signal, odometer pulses)
- DHCP client or static IP address

Fault diagnostics

P1. 1.10.6.1.2

- Assignment of geographic position by integrated GPS receiver

Service & Maintenance

P1. 1.10.6.1.2

- Convenient graphic web interface
- Failure management with automatic notification via email over an on-board system
- Local or remote access for system configuration and-system maintenance
- Central diagnostics for the complete counting system

Technical Data

Mechanical Properties

Dimensions (housing L x W x H)

IP40: 108.8 x 144 x 48.6 mm
IP54: 108.6 x 144 x 50.2 mm
IP40-Rack: 111.8 x 128.4 (3 HE) x 50.5 mm (10 TE)

Mounting flange (L x W x H)

IP40: 108.8 x 144 x 2.1 mm
IP54: 100.6 x 144 x 6 mm

Weight (incl. flange)

Approx. 500 g (for exact weights refer to the technical drawings of the devices)

Technical Data

Mechanical Properties

Material	Brushed stainless steel or anodized aluminum (depending on unit type)
Tightness (dust/water)	IP40 or IP54 (depending on unit type)

P1. 1.10.5.2 P1. 1.10.6.1.6

P1. 1.10.5.3

Electrical Properties

Nominal input voltage	24 V, 36 V
Supply voltage range	16.8 V ... 45V _{DC}
Current consumption at 24 V _{DC}	120 mA (without sensors), 650 mA (with sensors)
Insulation	500 V _{AC}
Voltage interruption class	S2 (according to EN 50155)
Digital inputs	Max. 60 V, max. 100 Hz, R _{in} = 5 kΩ
Digital inputs, voltage thresholds	Low < 2.5 V, High > 10 V
Digital input, odometer pulse "IN5"	Low < 1.5 V, High > 6.5 V, f = 20 kHz at 25 % / 75 %

Environmental Conditions

Operating temperature	-25 °C to +70 °C (-13 F to +158 F)
P1. 1.10.5.3 P1. 1.10.6.1.6, P1. 1.10.8.1.	
Storage temperature	-40 °C to +85 °C (-40 F to +185 F)

P1. 1.10.5.3

P1. 1.10.5.2

P1. 1.10.6.1.6

P1. 1.10.8.4.

Relative humidity	95 % (non-condensing)
Vibration and shock	EN 61373 Category 1, Class B
EMC	EN 50121-3-2
Railway applications	EN 50155
Protection class	EN 60529 IP40 or IP54 (depending on unit type)
ECE R10	E1 certified

Interfaces & Function

4 digital inputs, front	Universal use, e.g. door contact, door release
1 digital input, front	Odometer pulses, driving signal
1 digital input, front	Ignition, shutdown

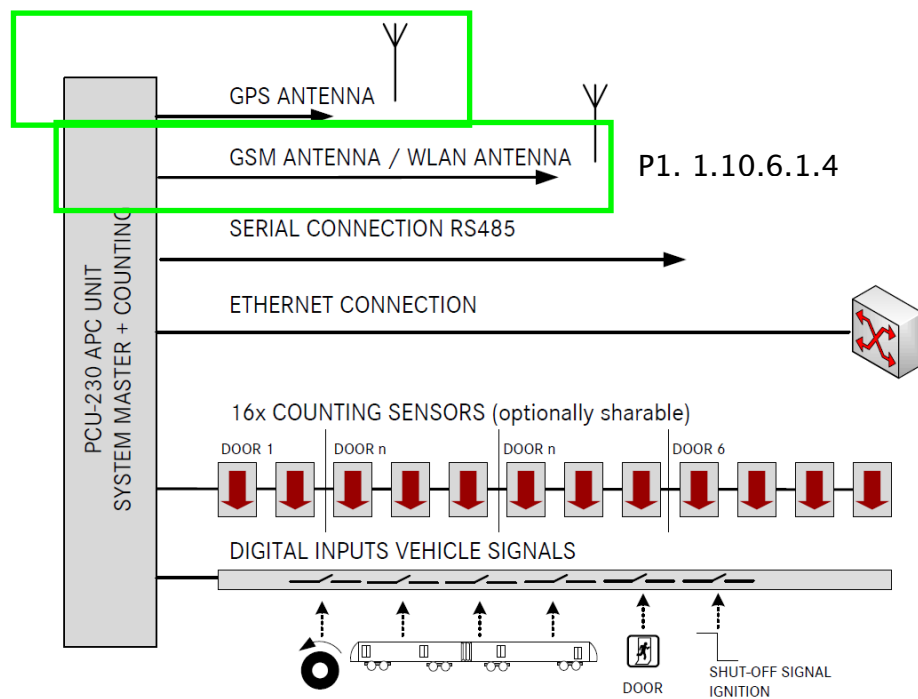
Technical Data

Interfaces & Function		
Data bus	RS485 semi duplex	
Data bus	Ethernet 10/100 BASE-T(X)	
Sensor data bus	Maximum of 16 sensors connectable	
GPS antenna	Connection of a GPS antenna	P1. 1.10.6.1.3
WLAN antenna (depending on unit type)	Connection of a WLAN antenna	
GSM antenna (depending on unit type)	Connection of a GSM antenna	P1. 1.10.6.1.4

Interfaces & Type		
P1. 1.10.6.1.5		
Ethernet Interface 10/100BASE-T(X)	With MDI/ MDI-X crossover detection, M12 socket, D-coded or RJ45	
Power supply, dig.IN, RS485, J1708	2 x 6-pole Phoenix male plug FKCN 2.5/6 STF	
DILAX counting sensor	1x DILAX-ES 12-female connector, 6-pole	
GPS antenna	1 x SMB/m	
GSM antenna	1 x FME/m with inner thread	
WLAN antenna	1 x SMA/f	

Connection Principle

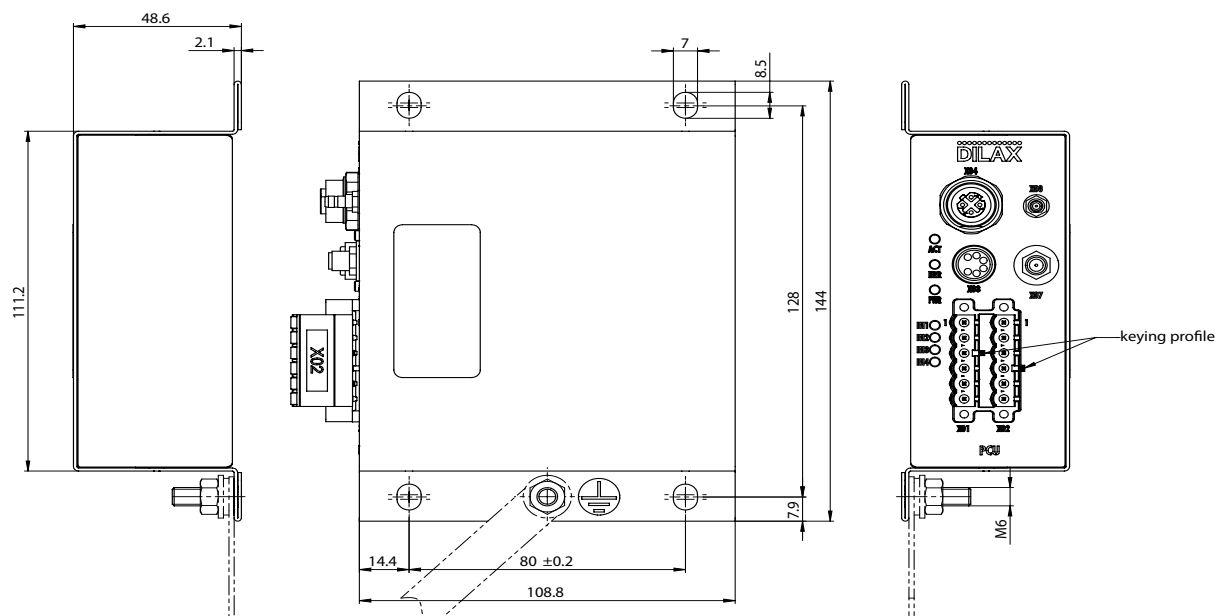
P1. 1.10.6.1.3



Dimensional Drawing

All dimensions given in millimeters.

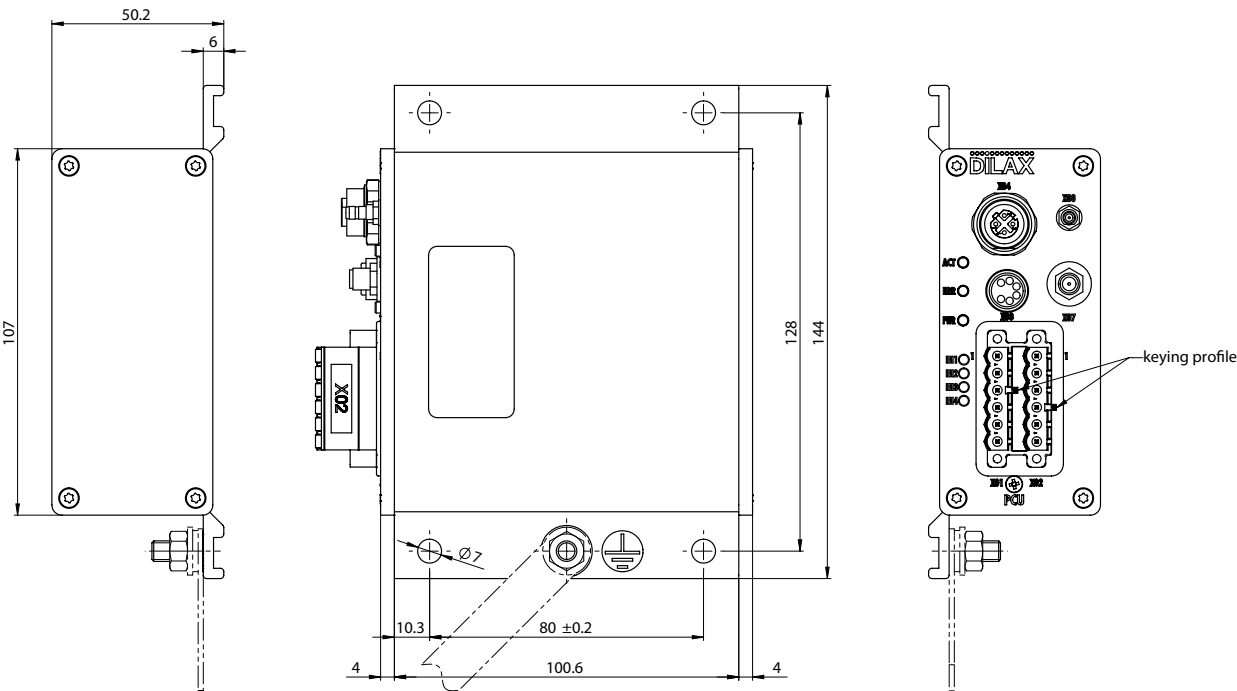
PCU-230, IP40



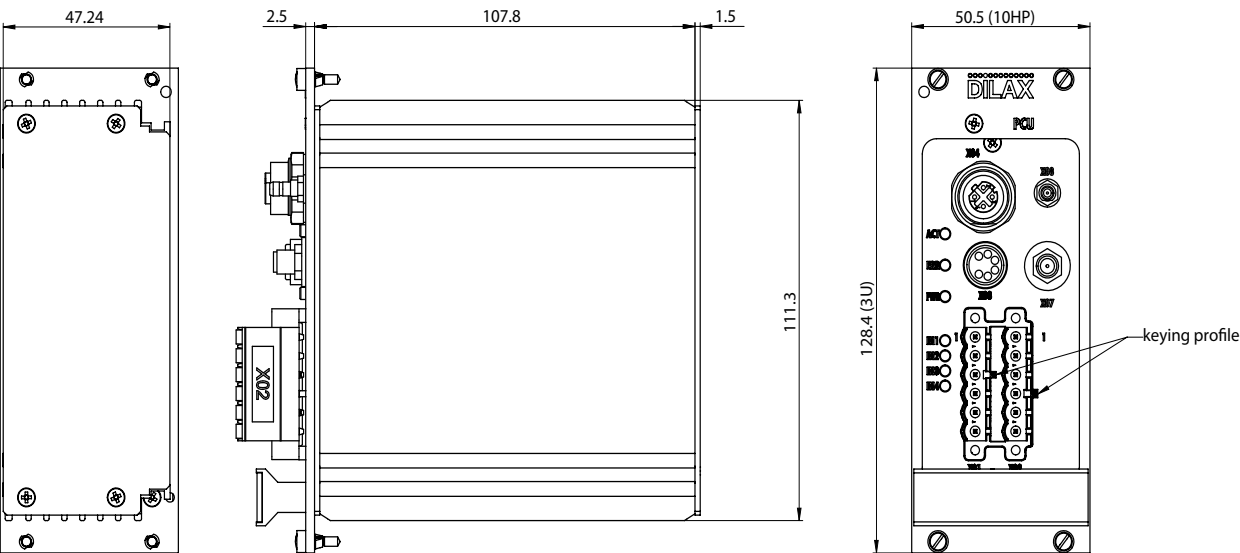
Dimensional Drawing

All dimensions given in millimeters.

PCU-230, IP54



PCU-230, IP40-Rack



Ordering Information

Article no.	IP code accord. EN 60529	Ethernet Interface front/back	Additional Features
000.202.235.150-E	IP40	RJ45/---	WLAN/GPS
000.202.235.180-A	IP40	RJ45/---	3G/GPS

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