PIC-6-XP

6-channel pulse counter for consumption recording

Front view

Features

- Consumption recording of electrical energy, water and gas using meters with pulse output
- 6 independent measurement channels
- Adjustment to commercially available pulse generators by simple setting of separate parameters for pulse generators and current converters
- Synchronisation with the quarter-hour signal of the public utility company (PUC)
- Consumption recording for high and low tariffs
- Correct recording, synchronised with PUC, and internal memory storage of power consumption for evaluating power peaks
- Saving of extensive consumption values for statistical analysis
- Graphical representation of power consumption and querying of consumption meters and statistics using FRIGODATA XP
- Simple parameter settings
- Plug-in screw terminals
- Temperature documentation with 2 temperature sensors (TRK277, DGF)
- Direct connection of a CAN-USB to the service socket
- Connection to the Wurm system by communication bus (CAN bus) and FRIGODATA XP

Writing conventions

Symbol	Meaning
⚠ **CAUTION**	Avoid the described hazard: otherwise **minor** or **medium** physical injury or damage to property will result.
⚠ **WARNING**	Avoid the described hazard: otherwise there is danger from **electric voltage** that could lead to death or **serious** physical injury.

For your safety

For safe operation and to avoid personal injury and equipment damage through operator error, always read these instructions, become familiar with the device, and follow all safety instructions on the product and in this document, as well as the safety guidelines of Wurm GmbH & Co. KG Elektronische Systeme. Keep these instructions ready to hand for quick reference and pass them on with the device if the product is sold.
Wurm GmbH & Co. KG Elektronische Systeme accepts no liability in case of improper use or use for other than the intended purpose.

Target group	These instructions are intended for "service technicians".
Intended use	PIC-6-XP is an impulse counter with 6 channels for recording the consumption of electrical energy, water and gas.

⚠ **WARNING**
Danger to life from electric shock and/or fire!

- Switch off the power to the entire plant when carrying out installation, wiring or removal work. Otherwise a mains voltage and/or external voltage may still be present even if the control voltage is switched off.
- Only qualified electricians are permitted to wire the device.
- Use only the correct tools for all work.
- Check all wiring after connection.
- Take note of the maximum loads on all connections.
- Never expose the device to moisture, for example due to condensation or cleaning agents.
- Take the device out of operation if it is faulty or damaged and is therefore compromising safe operation.
- Do not open the device.
- Do not attempt to repair the device yourself. If the device requires repairs, send it in with an exact description of the fault.

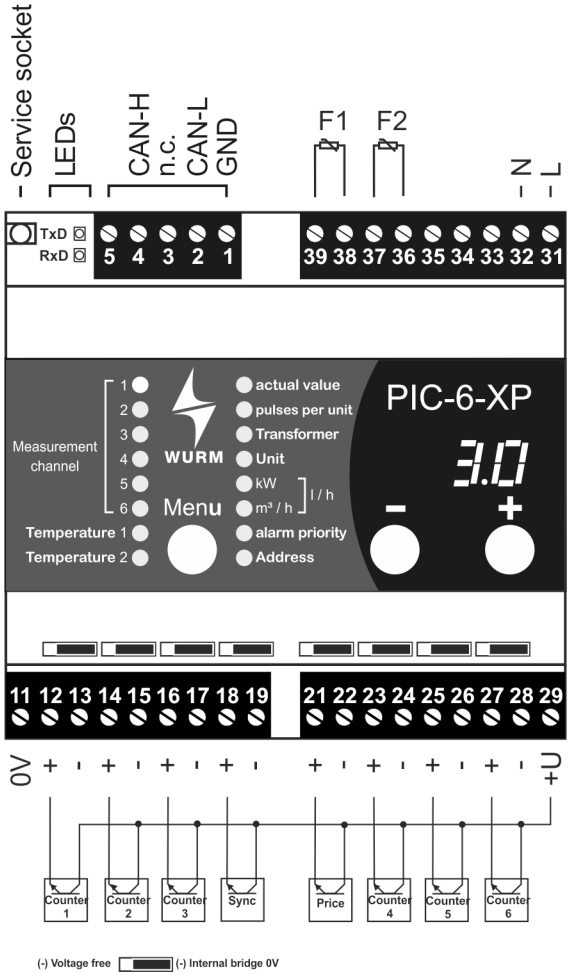
Wurm Infocenter paperless info

Software revisions and validity of documentation

Software version		
V1.9.1	2019-04	Documentation status

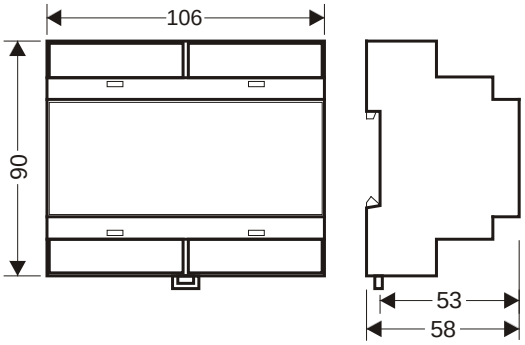
Any software versions not listed are special solutions for individual projects and are not described in detail in this document.
This document automatically ceases to be valid if a new technical description is issued.
Manufacturer: Wurm GmbH & Co. KG Elektronische Systeme, Morsbachtalstraße 30, D-42857 Remscheid
For further information, see our website at www.wurm.de

Connection diagram

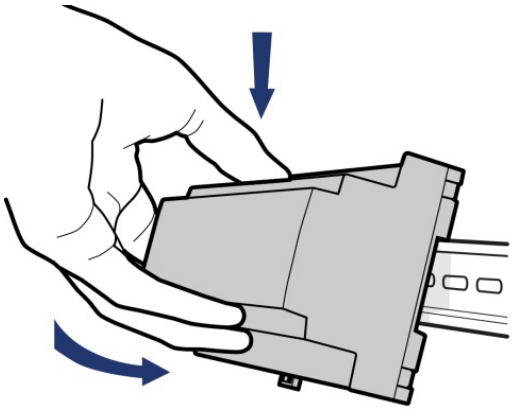


Installing

⚠	**WARNING** **Danger to life from electric shock and/or fire!** ▪ Switch off the power to the entire plant when carrying out installation, wiring or removal work. Otherwise a mains voltage and/or external voltage may still be present even if the control voltage is switched off.



This device is designed for top-hat rail installation.
The housing has standard dimensions and is also suitable for installation in fuse boxes and distribution cabinets.
The devices can be positioned next to one another without gaps.



Place the device with the upper guide edge on the top-hat rail.
Then press the device gently downward until it engages with the fastening safety catch on the top-hat rail.

Shielded cables are recommended for the cabling of data lines and sensor extension leads.

Cable length	Cross section
Up to 100m	0.75mm²
Up to 400m	1.5mm²

Technical data

Power supply	230V~, +10% / -15%, approx. 7VA
Temperature sensor	2 x TRK277 or DGF
Digital inputs	6 x potential-free metering input for power recording
Central unit	Single-chip microcomputer, data memory
Monitoring system	Self-monitoring of data memory and microcomputer
Communication	3-wire CAN bus interface with integrated power supply, galvanically isolated, service socket
Internal clock time	Detection of system clock time from the gateway, internal quartz clock with 5000h power reserve
Dimensions	(WxHxD) 106 x 90 x 58mm (DIN 43880)
Fastening	Top-hat rail TH 35-15 or TH 35-7.5 (DIN EN 60715)
Ambient temperature	Operation: 0...+55°C, storage: -25…+70°C
Weight	About 450g
CE conformity	– 2014/30/EU (EMC Directive) – 2014/35/EU (Low Voltage Directive)
EAC conformity	– TR CU 004/2011 – TR CU 020/2011
	RoHS II
Valid from	Version 1.8.0