

ProData® data logger

Data collection and recording

ProData® data loggers are used for the collection of any physical measurement data (temperature, pressure, ...) or any consumption values (electricity, water, gas, coolant...). ProData® data loggers consist of a programmable microprocessor, storage media, several interfaces and 16 channels for connecting sensors or pulse generators. External sensors are used to collect the measurement data and convert it with analogue-digital converters into “memory-safe” data in order to be able to be stored by the ProData® storage media. The collected data is read out through an interface and is analysed with suitable software. The ProData® can also be configured for the application through one of these interfaces (e.g. measurement intervals etc). Data loggers are indispensable for energy management systems e.g. for cost centre management. ProData® data loggers are also indispensable in the field of status monitoring.

Areas of application

- Data collection and recording of meter values
- Electricity cost data collection and cost centre management
- Analysis of process data
- Condition monitoring

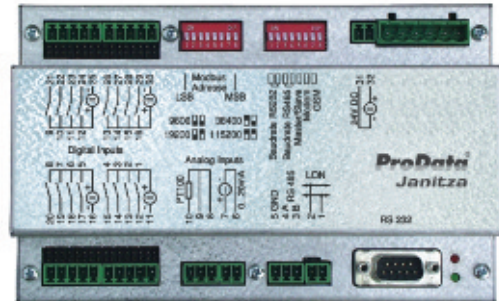
Data collection instrument

ProData® data logger

The ProData® data logger is suitable for collecting data and recording meter values.

Main features

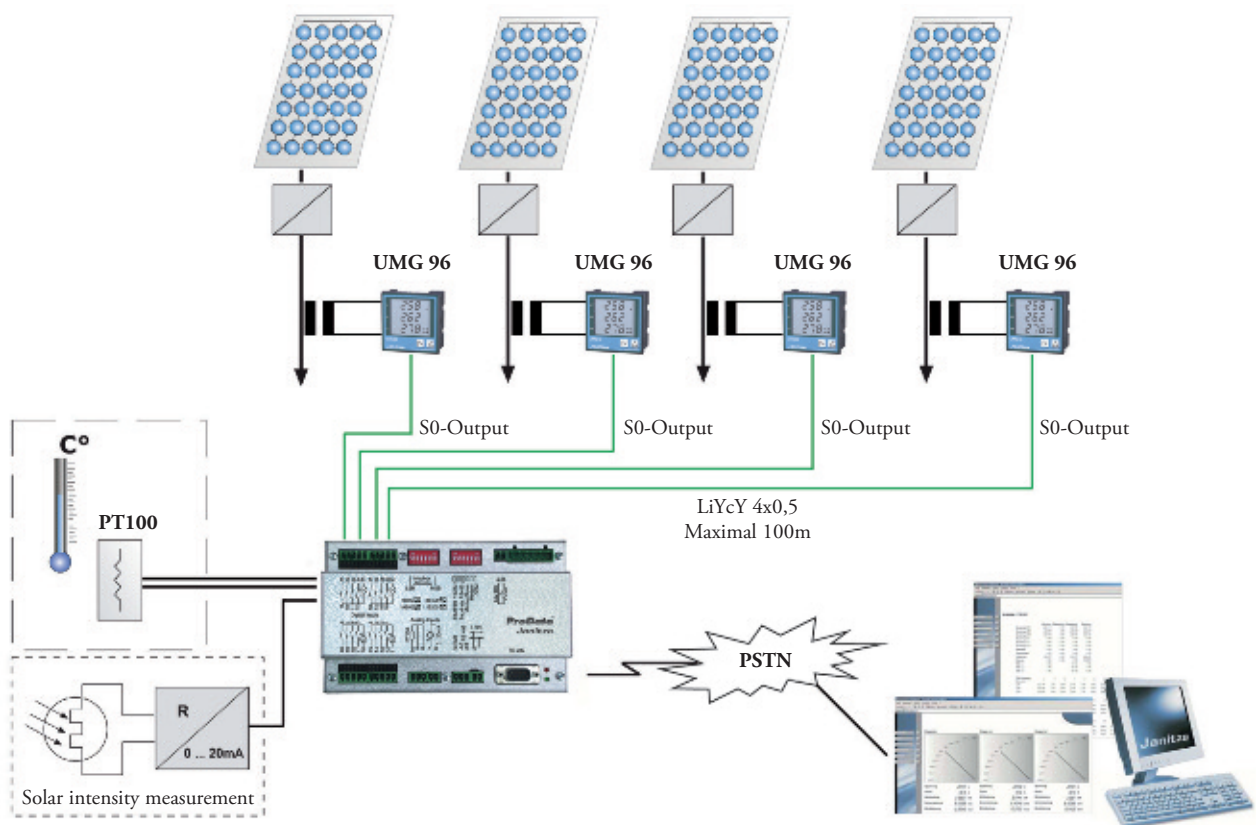
- The collection and recording of meter values
- 16 digital inputs
- 64 bit counter
- RS232, RS485, modem, Modbus
- 1 analogue input
- 1 temperature input
- Including GridVis software



Data recording

The analogue measurement values can be recorded in set time intervals (1 sec ...12h) as minimum, average and maximum values. In the set time intervals (1 sec ...12h), the difference between the overall meter readings and the meter reading at the last recording time is shown. The ring buffer for the values storage consists of 430KB and is sufficient for 3 months if the digital counters are recorded every 15 minutes.

Application example - photovoltaic





Analogue inputs

- 1 analogue input 0 (4) – 20mA, -20/20mA programmable
- 1 input for temperature sensor: PT100, PT200, PT500, PT1000, NTC10k or KTY83

The measurement values can be read through Modbus.

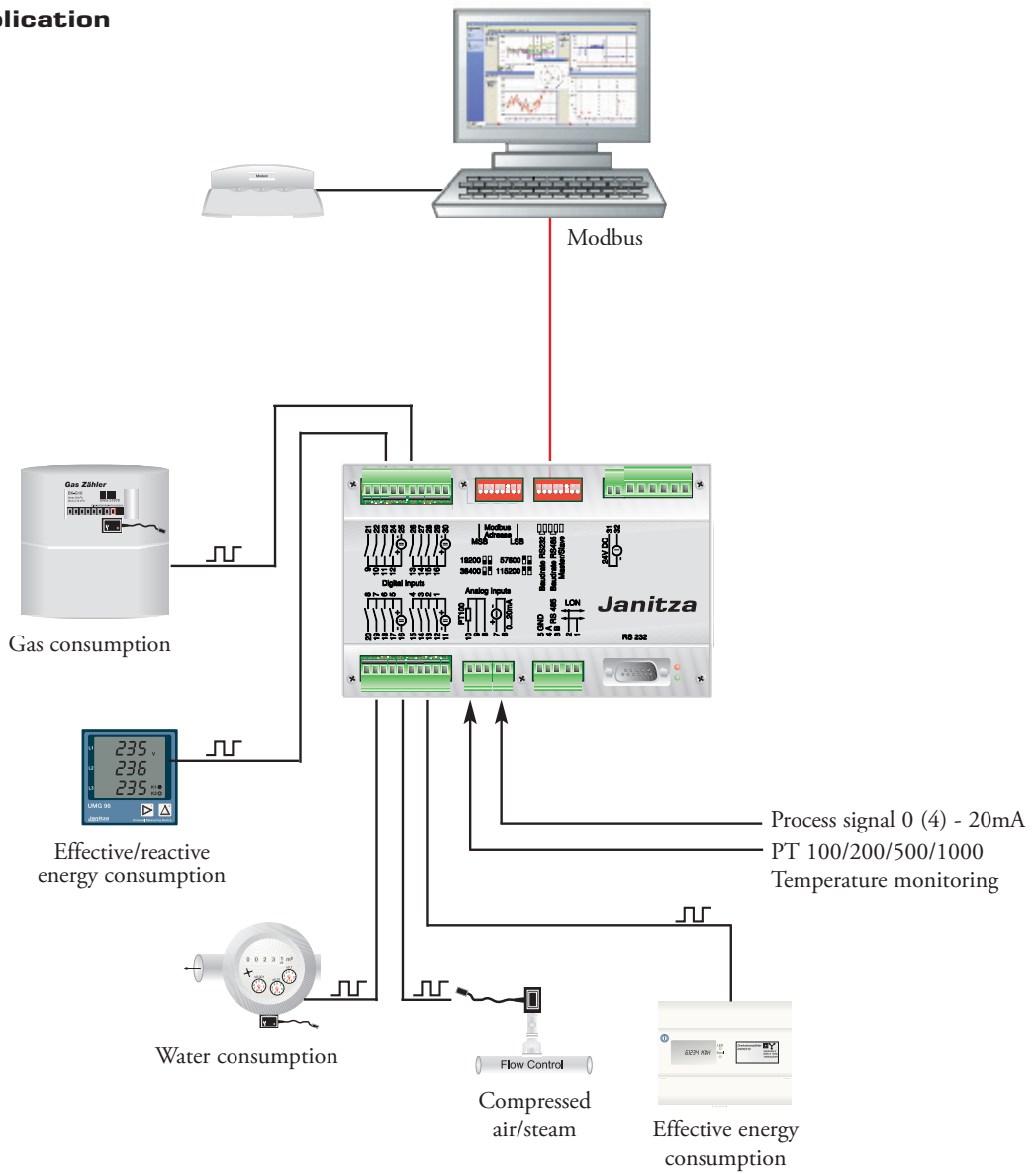
Digital inputs

16 digital inputs can be used as:

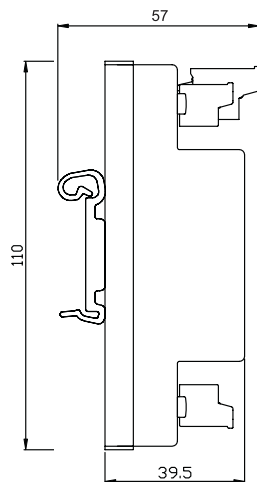
- An overall pulse counter at each input – maximum frequency 50Hz, 64 bit counter
- Frequency measurement on each input for monitoring flow quantities, power etc.

The stated measurement values can be read through the Modbus. The digital inputs (4x4) can be set as pulse (S0 interface) or as signal inputs using jumpers.

Typical application



Dimensional drawing





Overview of product variants		
Description	Type	Item number
Data logger	ProData®	52.11.001
External power supply	24VDC	16.05.002

General technical data		
Supply voltage	External power supply is necessary	24VDC (+15/-35%)
Overtoltage category		CAT II
Weight		660g
Dimensions		W=174mm x H=110mm x D=57mm
Mounting		DIN rail
Working temperature		-10...55 °C
Storage temperature		-20...60°C
Protection class	According EN60529	IP 20

Measurement range		
Effective energy (kWh) purchase/supply	Through the pulse input	Yes
Reactive energy (Kvarh), inductive/capacitive	Through the pulse input	Yes
Apparent energy	Through the pulse input	Yes
Temperature measurement input	-150...400°C	Accuracy: ± 1°C
Analogue input	4...20mA	Accuracy: ± 0.3mA

Features		
Consumption data collection		
Memory size		430kB
Clock		± 1 minute per month
Event recording		Yes

Periphery		
Digital inputs	As status or pulse input	16 (max. 50Hz, 64 bit counter)
Temperature measurement input	Pt100, Pt200, Pt500, Pt1000, NTC10k, KTY83	1
Analogue input	4...20mA, scalable	1
Software GridVis		Yes

Communication		
Interfaces		
RS 232	9.6, 19.2, 38.4, 115.2 kbps	Yes
RS 485	9.6, 19.2, 38.4, 115.2 kbps	Yes
Protocols		
Modbus RTU		Yes