

Data Pulse Module for Electricity Meters

Reads without direct access to the meter

Galvanically separated serial communication

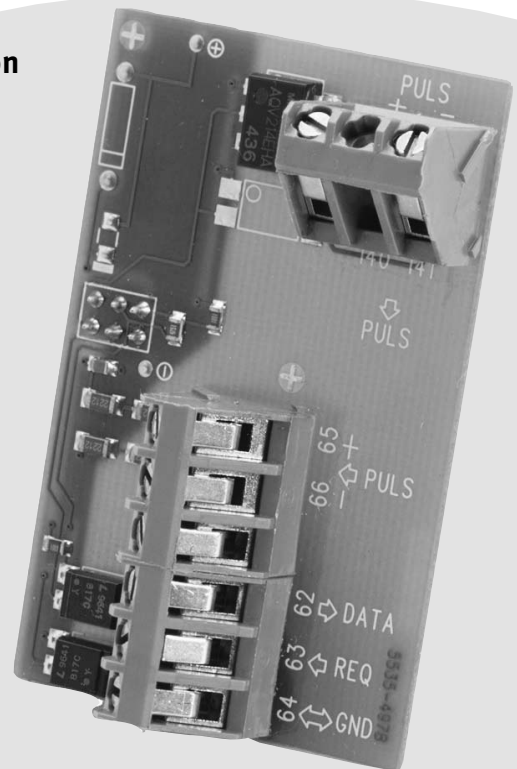
Collects pulses from other meters

Additional configurable pulse output

Galvanically separated pulse output

Easily mounted in the electricity meter

No reverification



Application

The data pulse module is used as pulse output no. 2, as an input for pulses and for connection of serial data communication.

The pulse output can retransmit the pulses of the electricity meter to data loggers or CTS equipment.

The pulse input offers the possibility of collecting pulses from other meters, e.g. a water meter with potential-free output.

The data/communication part is used to read or communicate with the electricity meter without having direct access to it, e.g. via a plug mounted outside the building.

The data/pulse module is easily mounted in the 6-pole plug in the modular space of the electricity meter. The modem can be mounted separately or replaced without renewing the verification of the meter.

The pulse output is galvanically separated from the processor of the electricity meter.

The pulse length is determined in connection with configuration of the electricity meter. 30 ms if selecting 1000 pulses/kWh or 60 ms if 1 pulse/kWh (standard) is selected.

The pulse input is a galvanically linked connection between the processor of the electricity meter and a potential-free pulse output e.g. on a water meter or another electricity meter. The lowest pulse time is selected in connection with configuration of the meter.

Data/communication is galvanically separated between the processor of the meter and the equipment with serial communication, which is linked, e.g. a hand-held terminal or a PC.



Kamstrup A/S
Industrivej 28, Stilling
DK-8660 Skanderborg
TEL: +45 89 93 10 00
FAX: +45 89 93 10 01
E-MAIL: energi@kamstrup.dk
WEB: www.kamstrup.com

Technical data

Supply	Internally via the electricity-meter
Power consumption	< 0,008 W
Connection terminals	0.15 mm ² - 2 mm ²
Recommended cable cross section	0.5 mm ²
Operating temperature	- 20°C - + 60°C

MECHANICAL DATA

Storage temperature	- 40°C - + 70°C
Protective class	IP 51 in the electricity meter
Relative humidity	< 95% non-condensing
Weight	Approx. 30 g
Dimensions, W x L x H	42 x 64 x 17 mm

MARKINGS/APPROVALS

CE marking	Meets the demands of the electricity meter
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DATA/COMMUNICATION

Serial communication	300/1200 baud
Open collector, I	0.7 (max. 2) mA
IEC 1107 mode A	300 baud

PULSE OUTPUT

The pulse output 2 of the electricity meter is configured as follows:

1 pulse/kWh	60 ms +/- 10%
1000 pulse/kWh	30 ms +/- 10%
Voltage, max.	400 VAC og DC
Max. current	0.12 A
Resistance On/Off	50 Ω / 1000 MΩ

PULSE INPUT

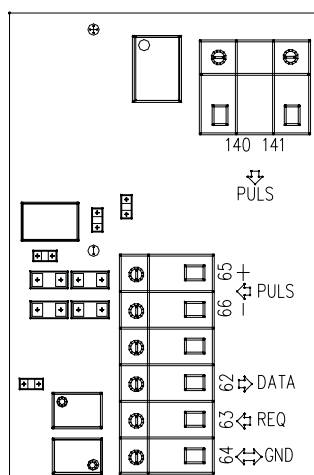
For potential-free switch, e.g. reed-switch or relay.

Maximum values

In connection with configuration =	Standard	Fast
Cable length, max.	20 m	20 m
Cable capacity, max.	100 nF	10 nF
Leak current, switch max.	0.5 uA	0,5 uA
Frequency, max.	0.5 Hz	16 Hz
Pulse time, min.	1 sec.	10 ms
Interval time, min.	1 sec.	90 ms
Number of pulses in before the display reading changes	1	8

Installation

The module is mounted in the electricity meter on the modular space under the transparent lid.



Pulse output relay

- 140 External signal current AC/DC
- 141 External signal current AC/DC

Pulse input

- 65 + Signal current for passive output
- 66 - Signal current from passive output

SERIAL COMMUNICATION

- 62 DATA
- 63 REQ
- 64 GND

Order specification

Description	Type no.	Description	Type no.
Data pulse module, relay	68 50 003	RS232 converter with cable	66 99 106
RS232 converter with jack plug	66 99 105	External reading plug with 2 m cable (is available in cable lengths of up to 25 m)	65 61 891