

AMBUS® IS 2W AMBUS® IS 2T HS Pulse collectors

Application

The AMBUS® IS 2 pulse collectors provide the interface to an M-Bus system for two meters with a pulse output (potential-free contacts or SO output).



Features

- Double-acting pulse collector
- Billing date function
- Power supply via M-Bus
- Freely programmable
- Internal battery
- Tariff switching
- For wall (W) or rail (HS) mounting

Benefits

- Cost-effective
- Accurate billing
- Simple installation
- Universal application
- Meter reading backup on power failure
- Ideal for tariff-based applications
- Two mounting options

Description

The two pulse inputs can be freely configured and therefore fully adapted to existing installations. The tariff function is activated by the user and enables the energy or volume pulses to be totalized from separate meter readings for main and sub tariffs. The tariff function simply requires a pulsed and a switchover signal, e.g. from a radio controller of a power supply. The back-up battery ensures that the pulse adapter is fully functional even when the M-Bus power supply fails so that data from the meters are protected from loss at all times. In addition, all meter readings are stored in a non-volatile memory at regular intervals.

Function

The AMBUS® IS 2W pulse collector can configure up to two pulse transmitters with a potential-free output (e.g. gas, water, electricity meter, ...) or, in many cases, also electronic SO outputs to the M-Bus system. Both pulse inputs can be configured individually so that the AMBUS® IS 2W pulse collector behaves like two independent M-Bus end units.

The M-Bus provides the power for the AMBUS® IS 2W pulse collector. An internal battery ensures the meter keeps running even when the M-Bus fails for long periods of time. Another important feature of the AMBUS® IS 2W pulse collector is its billing date function. The meter data are stored separately on the preset billing date using the clock and calendar function. Annual consumption data, for example, can be called up without additional evaluation software. The AMBUS® IS 2T HS pulse collector has the same functional characteristics as the AMBUS® IS 2W but, in addition, has a tariff input for 230 VAC signals (e.g. from a radio receiver). The AMBUS® IS 2W is available in a housing for wall mounting and the AMBUS® IS 2T HS in a housing for standard (3 HP) rail mounting.

Technical data

Power supply	from M-Bus with automatic switchover to battery on power failure
Bus operation	max. 1.5 mA (1 standard load), no battery load
Battery operation	current consumption max. 50 µA
Operating life 0.23 Ah	10 years at max. 18 downtime days per year (replaceable button cell)
Temperature range	0 ... 55 °C
Pulsed inputs	2, individually adjustable
SO interface	according to IEC 61393 / DIN 43864
Contact voltage	2.5 ... 3.6 V
Contact current	30 µA
Bounce time	5 ms
Connecting cable, pulse transmitter	max. 10 m
M-Bus protocol	EN1434-3
Transmission rate	300, 2 400 baud (autom. recognition)

Specifications for pulse contacts of the pulse transmitter

Potential	potential-free
Resistance	open >1 MΩ, closed <2 kΩ
Contact make, break	min. 30 ms
Pulse frequency	max. 14 Hz
Tariff signal	potential free (data as above) or 100 ... 250VAC (AMBUS® IS 2T HS)

	AMBUS® IS 2 W	AMBUS® IS 2 HS
Mounting	wall	rail
Dimensions W x H x D	80 x 80 x 52 mm	93 x 51 x 58 mm
Tariff input	potential-free contact to pulse input 2	potential-free contact to pulse input 2 or 230 V AC to tariff input
Ingress protection	IP 54 (IP 65 possible, see mounting instructions)	IP 40

Ordering

AMBUS® IS 2W pulse collector	Parts No. 92437	Set of instructions & software for AMBUS® IS 2W	Parts No. 93164
AMBUS® IS 2T HS pulse collector	Parts No. 93112	Set of instructions & software for AMBUS® IS 2T HS	Parts No. 93165