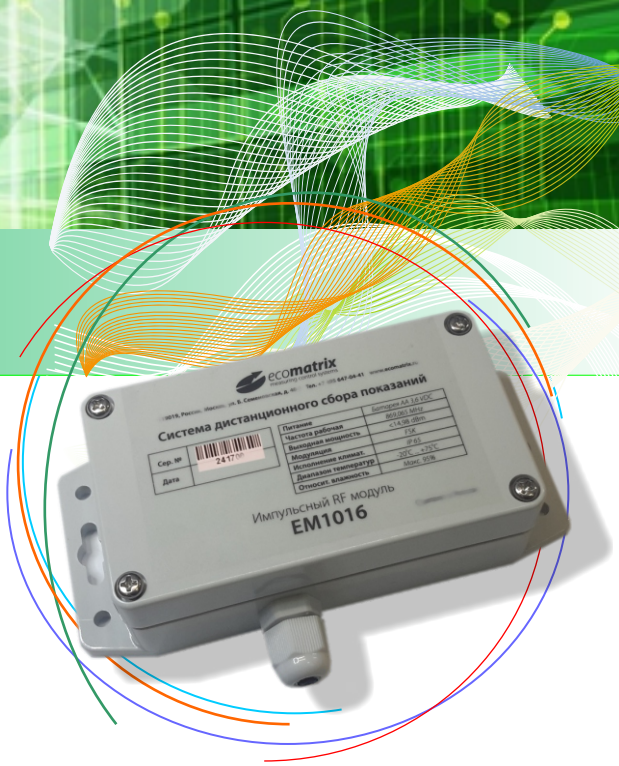
EM1016
pulse RF module

Technical description

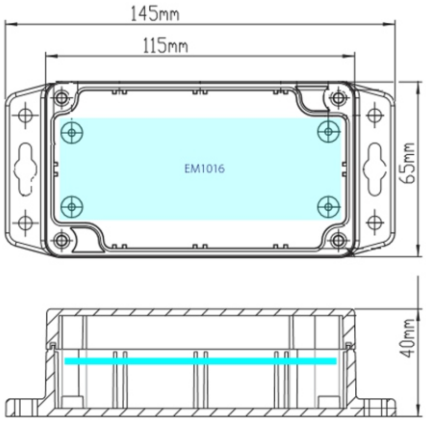


The EM1016 pulse radio frequency (RF) transmission module is designed for collecting, storing, and transmitting consumption parameters (current, hourly, and daily) via a radio channel from water, electricity, and gas meters equipped with pulse outputs, as well as from signaling devices with digital outputs.

The module has 4 pulse/digital inputs for connecting signal sources. The EM1016 is powered by a built-in lithium battery, providing more than 10 years of uninterrupted operation.

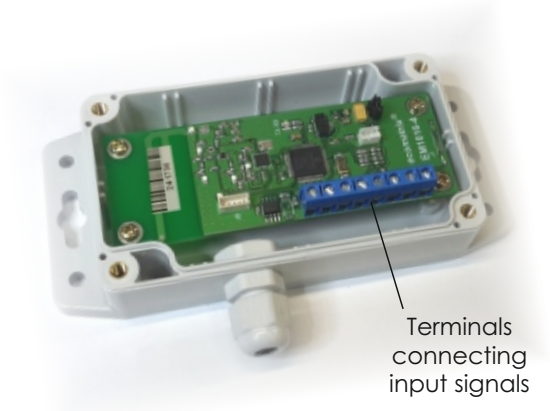
The built-in archiving system stores current values for each input for up to 6 months and enables retrieval, upon user request via the radio channel, of data for any desired period in the form of current, hourly, or daily parameter records.

Main dimensions:



Technical specifications:

Description	Pulse RF unit EM1016
Input Connection Types	4 programable indipendent inputs from meters with pulse outputs (dry contact, open colector)
Inputs Specification	Input type – "dry contact", "open collector"; Pulse frequency – up to 128 Hz
Box Size	145x65x40mm
Unit Weight	150 grams
Power Supply	1 or 2 lithium batteries, "AA" size, 3,6 VDC, 2400 mA*h
Operational Life	more than 10 years
Settings time intervals between transmitions	10 sec…18 hours
Maximum trend numbers of each input	storage of hourly and daily values for each input for up to 6 months
RF frequencies (ranges)	FSK 430/860/900 MHz
RF Transmit Bitrate	10.0 kbps
Wakeup	Periodic – internal timer
Configuration Storage	Non-volatile memory
Environmental	IP-65
Operating Temperatures	-40° C to +70° C
Humidity	Max. 90%



Input terminal assignment:

IN1	Input 1	Signals from metering devices with pulse outputs and from devices and equipment with discrete outputs
COM	Common	
IN2	Input 2	
COM	Common	
IN3	Input 3	
COM	Common	
IN4	Input 4	
COM	Common	

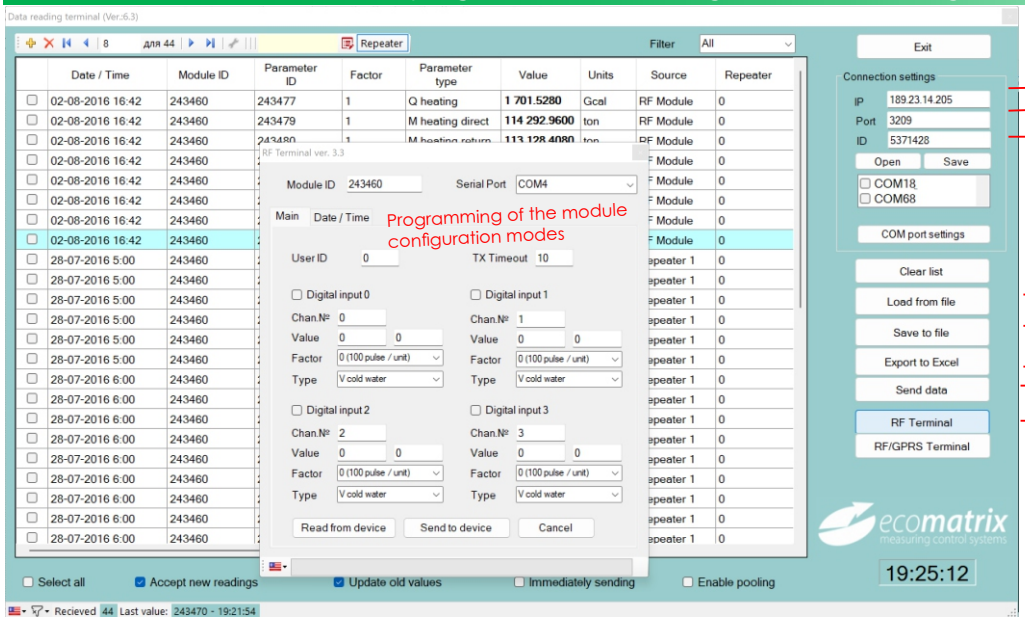
Pulse RF EM-1016 module

Settings and data reading from the EM-1016

Programming of EM1016 settings (both general and for each individual input), as well as data and archive reading, is carried out via radio channel using the RF Terminal device (EM3011) and specialized software.

The Terminal is a transceiver equipped with a built-in or external antenna and connects to a computer or tablet via a USB cable. This device is designed for use in the WalkBy system, where it functions as a receiving module, enabling data collection from devices located in the field without the need for direct contact. Additionally, the RF Terminal is used for configuring various system devices via the radio channel. In combination with the appropriate software, the RF Terminal allows convenient remote equipment setup, significantly simplifying system maintenance processes in the field.

The "Data Collection Terminal" program – data reading and mode settings:



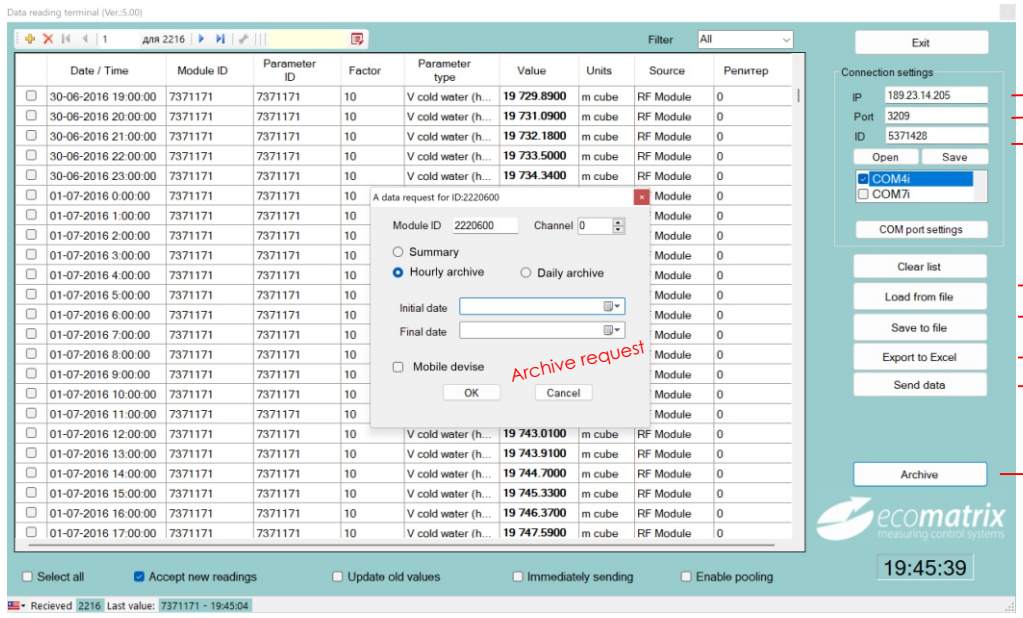
Connection settings for transmitting selected data to the server

Data upload/download, export of selected data to Excel

Sending selected data to the server

Launching the program for configuring the EM1016 module modes

The "Archive Collection Terminal" program – retrieval of archived data:



Connection settings for transmitting selected data to the server

Data upload/download, export of selected data to Excel

Sending selected data to the server

Request for retrieving archived data