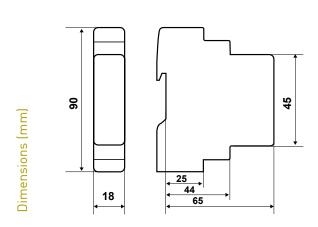
# VM001

# Communication modules

Compact-design communication modules, series VM001x, allow centralized managing and monitoring of all of the different electric energy meters of the VM series. Data exchange with the energy meter is implemented via an optical port located on the right side of the module, thus ensuring friendly installation and top-safety operation.





Type of communication	DIN modules	Power supply and	consumption

VM001A	RS485-MODBUS	1	230V ± 20% / 50Hz, max 5VA	
VM001B	M-BUS	1	directly via bus (2 unit-load)	
VM001C	LAN GATEWAY - MODBUS TCP	2	230V ± 20% / 50Hz, max 5VA	

## VM001A - RS485-MODBUS COMMUNICATION MODULE

The RS485 module allows to collect and transmit measurement data of the connected energy meter to a remote station. Data transmission is implemented via RS485 line, using the MODBUS RTU or ASCII protocol.

MODBUS is the most popular communication protocol designed and being used today to allow industrial electronic devices to communicate.

The RS485 module is provided with a SET DEFAULT key to reset all communication parameters to factory default settings. This function is very serviceable in the event that the MODBUS logic address has been forgotten. The two LEDs located on the front panel provide info on the power supply status and the communication status.

### VM001B - M-BUS COMMUNICATION MODULE

The MBUS module allows to collect and transmit measurement data of the connected energy meter to a remote station using the M-Bus protocol. The M-Bus (Meter-Bus) is a European standard for remote reading of consumption meters. A dedicated software is provided for module configuration and for displaying the detected measurements.

The MBUS module is provided with a SET DEFAULT key to reset all communication parameters to factory default settings. The two LEDs located on the front panel provide info on the power supply status and the communication status

#### VM001C - LAN-GATEWAY COMMUNICATION MODULE

The LAN GATEWAY module allows to manage a single energy meter by any PC connected to LAN/internet via a common web browser. LAN GATEWAY module web pages have been designed to be cross compatible with the following web browsers: Internet Explorer 7, internet explorer 8, Mozilla Firefox 3.xx, Apple Safari, Google Chrome, Opera, Netscape navigator. A further basic feature is the use of the MODBUS TCP protocol for module communication. MODBUS TCP is the most popular communication protocol designed and being used today to allow industrial electronic devices to communicate. MODBUS TCP allows to set a specific monitoring application, according to the needs. The LAN GATEWAY module is provided with a SET DEFAULT key to reset all communication parameters to factory default settings. The two LEDs located on the front panel provide info on the link activity and the link status.