

## PiiGAB M-Bus 900



Ethernet/M-Bus Gateway

### Features:

- Up to four parallel clients
- 2 x 10/100 Mbit Ethernet
- TCP, UDP, Serial (configurable)
- Fixed IP address or dynamic via DHCP
- Operative system independent
- Modbus TCP/RTU Slave
- Acts as an M-Bus meter on the M-Bus net
- Reads out the M-Bus network voltage and current levels

### High security:

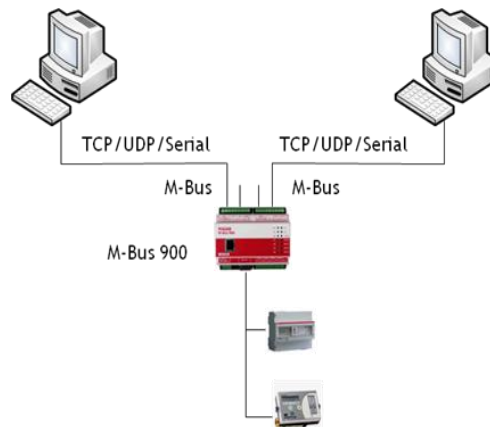
- Password protected
- Uses HTTPS with SSL during configuring

### Typical applications:

- Remote reading of electricity, heat, water, gas meters and other digital and analog signals from multiple directions simultaneously.
- Individual reading of apartments.
- Value monitoring of different buildings within an industrial or hospital property.
- Easy tracking of the electricity consumption of schools in a particular city.
- "Read out" data from existing M-Bus networks.
- Configure and test meters without shutting down the main system.
- Supports redundant remote reading systems.
- Remote reading via two independent networks.

**PiiGAB M-Bus 900 is a gateway/converter series developed for remote reading of M-Bus meters with up to four clients simultaneously. The remote reading can be done using local network, city network, internet, normal serial communication or via an existing M-Bus master. It is also possible to connect a Modbus client in parallel to read values from an M-Bus meter to a PLC/DUC or a local display.**

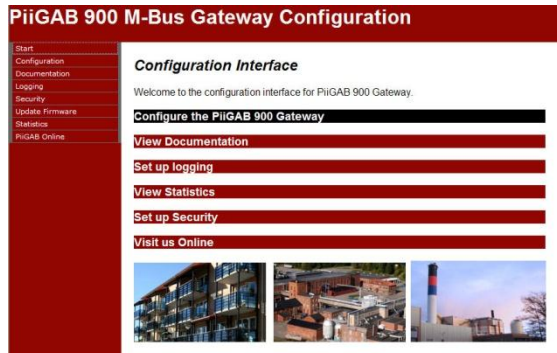
Set the client port address to the PiiGAB M-Bus 900 and it will do the rest no matter if you use single or multi telegram, primary or secondary addressing in your meters, and there are no extra adjustments necessary via inbuilt dip switches etc. It is also possible to run single telegram on one port and multi telegram on another and the same is valid for primary and secondary addressing.



The PiiGAB M-Bus 900 is designed to transparently read all type of meters which support the M-Bus standard, and it translates the electrical signals of M-Bus to respective clients. The transparent M-Bus message in the gateway and the message leaving one of the four ports is the original message, which can be sent e.g. to a database for further handling.

## Configure

The PiiGAB M-Bus 900 is configured using a web interface reached via the built in web server. The data traffic between the server and the client is being sent via HTTPS, which uses SSL (Secure Sockets Layer) to encrypt the data traffic. This protects passwords and other sensitive information that is being sent or read from being monitored.



## PiiGAB M-Bus Setup Wizard

It is of course also possible to continue to use our popular PiiGAB M-Bus Setup Wizard to find gateways on the network, test, search, and to configure meters. There is also the option to use it in parallel with other clients.



## M-Bus ASCII

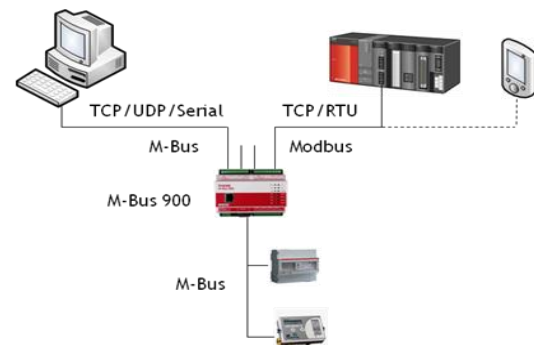
In cases where there is a need for remote reading of fewer meters to a superior system without using an M-Bus driver we can offer our M-Bus ASCII protocol. This protocol calls the built in M-Bus client, which in turn handles all the communication with the actual meters.

## Order information:

Order number
PI-900/M-Bus Loads/Clients
M-Bus Loads
5, 20, 60, 120
Clients
1, 2, 4

## Modbus

The PiiGAB M-Bus 900 includes the option of a Modbus slave driver. The Modbus slave can be used independently or together with external systems such as SCADA systems or configuration tools. This means that it is possible to let a RTU or PLC to perform measurements that are dependent of the meter values and these values can be stored in a database with full tracking via the M-Bus protocol. The M-Bus client used is the same client used in PiiGAB's M-Bus OPC server, which means all data types in M-Bus can be converted to Modbus. The slave can be configured for Modbus TCP or RTU and you can choose to run the Modbus RTU protocol via RS232 or RS485.



## Specifications Modbus:

- **Modes:** TCP/RTU
- **Function codes:** 03/04
- **Data types:** INT/UINT/LONG/ULONG/FLOAT/DOUBLE FLOAT/STRING
- **Parameters:** StationId, FloatMode
- **Register area:** 0-65535

## Technical specifications:

- **Ports:** 1xRJ45 for Ethernet (Option Eth2), 1xRS232, 1xRS485, 1xM-Bus slave, 1xM-Bus master
- **Operating system:** Full Linux 2.6
- **Memory:** 32 MB Ram, 2x8 MB Flash, Micro SD
- **Power supply:** 24V DC or AC (local power)
- **Rated Current:**
  - 250mA (5 and 20 M-Bus loads)
  - 350mA (60 M-Bus loads)
  - 450mA (120 M-Bus loads)
- **Coating:** IP 20
- **Size:** BxHxD 107.6 x 90 x 62.2
- **Montage:** DIN- rail
- **M-Bus:** EN 1434-3, EN13757-2, -3
- **Number of load units:** 5, 20, 60, 120

## Supplementary modules:

Order number	Description
PI-900/Modbus	Modbus RTU/TCP
PI-900/Eth2	Additional Ethernetmodul
PI-900/QP	QuickPost

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