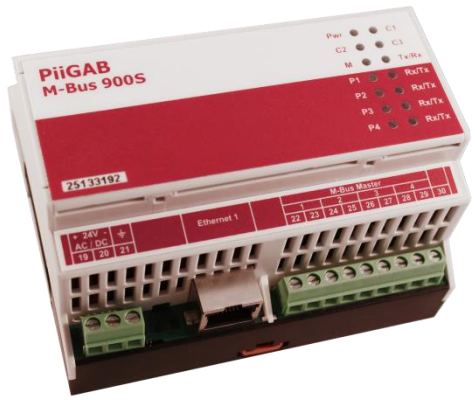
PiiGAB
PROCESSINFORMATION

PiiGAB M-Bus 900S



Universal Ethernet/M-Bus Gateway

Features:
- *Up to four parallel clients.*
- *Software license for all updates.*
- *TCP, UDP, Serial (configurable).*
- *Fixed IP address or dynamic via DHCP.*
- *Operative system independent.*
- *System clock can be synchronized with a NTP server.*
- *Modbus TCP/RTU Slave.*
- *Acts as an M-Bus meter on the M-Bus net.*
- *Read the M-Bus voltage and current.*
- *One relay, control by M-Bus telegram.*
- *Two digital inputs, can be read from M-Bus telegram.*
- *Possibility to shutoff sections on the M-Bus output.*

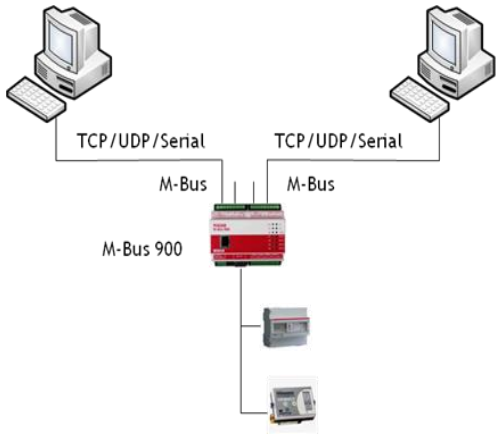
High security:
- *Password protected*
- *Uses HTTPS with SSL during configuring*

Typical applications:
- *Remote reading of electricity, heat, water, gas meters and other digital and analog signals from multiple directions simultaneously.*
- *Individual reading of apartments.*
- *Configure and test meters without shutting down the main system.*
- *Supports redundant remote reading systems.*

Commonly for all uses of the PiiGAB M-Bus 900S is the possibility to connect to existing networks regardless what the networks are used for.

PiiGAB M-Bus 900S 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 two existing M-Bus masters. 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.

Remote control
Many things in the PiiGAB M-Bus 900S are handled through remote control. For example if you wish to increase the total number of M-Bus loads, clients or other features, we will deliver a new license by e-mail which you can install in the web interface. The M-Bus loop's voltage and current can be read remotely. The different sections on the M-Bus output can also be turned on or off remotely to help during the configuration and testing.



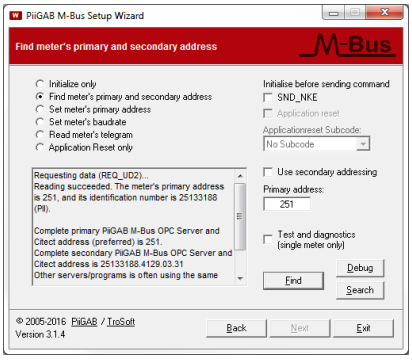
The PiiGAB M-Bus 900S is designed to transparently read all type of meters which support the M-Bus standard (EN13757). The gateway translates the electrical signals of M-Bus to respective clients. The transparent M-Bus message in the gateway and the message leaving one of the four ports is the original message, which can be sent e.g. to a database for further handling.

Configure

The PiiGAB M-Bus 900S 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 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.



Technical specifications:

- **Ports:** 1xRJ45 for Ethernet, 1xRS232, 1xRS485, 2xM-Bus slave, 1xM-Bus master with four parallel outputs.
- **Operating system:** Full Linux 3.10.
- **Memory:** 256MB Ram, 256MB Flash, Micro SD.
- **Power supply:** 24V DC/AC (local power).
- **Rated Current:**
  250mA (5 and 20 M-Bus loads)
  350mA (60 M-Bus loads)
  500mA (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, -4.
- **Number of M-Bus loads:** 5, 20, 60, 120.
- **CE markings:** Emission and Immission.

Add-on features:

Here follows a list of all add-on features for PiiGAB M-Bus 900S. All features have a separate data sheet.

M-Bus ASCII

In cases where there is a need of reading M-Bus meters to a superior system without buying or implementing 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.

M-Bus to Modbus

The PiiGAB M-Bus 900S includes the option to read M-Bus meters from Modbus through a virtual Modbus slave. For sites where there are no M-Bus drivers/clients and where only Modbus is available the MBus2Modbus add-on can allow the M-Bus meters to be read. Inside the PiiGAB M-Bus 900S is the same M-Bus client as in the M-Bus OPC-server which will handle all communication. The Modbus slave supports both Modbus TCP and Modbus RTU protocols.

Modbus to M-Bus

The Modbus2MBus application will allow any Modbus devices/slaves to be combined in an M-Bus network. Thorugh the PiiGAB M-Bus 900S all Modbus devices will be seen as virtual M-Bus meters with their own M-Bus primary and secondary addresses on the M-Bus network.

QuickPost

You can let the PiiGAB M-Bus 900S read the M-Bus meter by itself and send the information to an FTP or HttpPost server with the QuickPost application. There is no need for a server to handle all communications. QuickPost will be considered an M-Bus client for the PiiGAB M-Bus 900S and use one of the slave ports. The other slave port can still be used for other clients.

Order information:

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

Supplementary modules:

Order number	**Description**
PI-900S/MBus2Mod	M-Bus to Modbus
PI-900S/Mod2MBus	Modbus to M-Bus
PI-900S/QP	QuickPost

900.E.1.16

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