

Getting started PiiGAB QuickPost

PiiGAB M-Bus Explorer & PiiGAB M-Bus 900

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1. Document Information

PiiGAB QuickPost software add-on for PiiGAB M-Bus 900 gateway is developed by PiiGAB with the purpose of helping users to transmit readings of M-Bus meters over FTP or HttpPost without the need to have specific M-Bus drivers in the computer. Inside PiiGAB M-Bus 900 there is an internal meter which will be used to represent an M-Bus meter. PiiGAB's M-bus ASCII protocol is used to extract the raw M-Bus data from the internal meter and store it into a readable file. PiiGAB have a free and public FTP-server which you may use to test that you can send your files to.

1.1 Versions

Version	Modified by	Detail
1.00.00	Stefan Eriksson	Initial version.
1.00.01	Stefan Eriksson	Edited distributor contact information.
1.00.02	Stefan Eriksson	Changed URL to public FTP-server.

2. Conditions

2.1 Preconditions

- <continue>

2.2 Requirments

- PiiGAB M-Bus 900 gateway V2.XX.XX of MBusHub
- Connection to the PiiGAB M-Bus 900 gateway and it's web interface
- License for PiiGAB QuickPost in your PiiGAB M-Bus 900
- PiiGAB M-Bus Explorer installed

2.3 Optional requirements

- <continue>

3. Software and license

This section will describe how to check the software and license for the QuickPost.

3.1 Check QuickPost software installation

1. Open PiiGAB M-Bus 900's web interface.



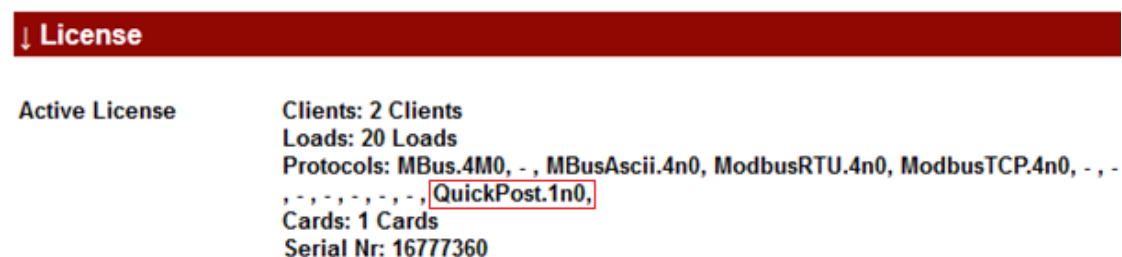
2. In the left navigation field, make sure *QuickPost* is present.

Note:

If you don't have QuickPost available in the navigation field please go to section 3.3 *Installation QuickPost* for instructions how to install it.

3.2 Check QuickPost software license

1. Open PiiGAB M-Bus 900's web interface.
2. Click on *Administration*.
3. Go down to the section called *License*.
4. Make sure *QuickPost* is visible in the *Protocols* field.



Note:

If you don't have a license enabling QuickPost, please contact PiiGAB to order it. Make sure to specify the PiiGAB M-Bus 900's serial number.

3.3 Installing QuickPost

If your PiiGAB M-Bus 900 lacks QuickPost software you can download it and install it your self

1. Go to PiiGAB's homepage www.piigab.com and the download section.
2. Download the QuickPost file to your computer.
3. Open PiiGAB M-Bus 900's web interface.
4. Click on *Administration*.
5. Go down to the *Update software* section.

↓ Update Software

Install Firmware/Software

Install

Bläddra...

6. Press the *Browse* (Bläddra...) button and browse the QuickPost file on your computer.
7. Press the *Install* button.
8. Wait a couple of seconds to let the installation complete.
9. Update/refresh your browse.
10. QuickPost should now be present in the left navigation field.

3.4 Set the gateway's internal clock (optional)

It's recommended to set the internal clock in the PiiGAB M-Bus 900 to match the FTP- or HttpPost-servers' clock.

1. Open PiiGAB M-Bus 900's web interface.
2. Click on *Administration*.
3. Go down to the *Time and Date* section.

↓ Time and Date

Hardware clock should be set to UTC

Local Time	2000-06-29 07:57:52	
Hardware Clock	Thu Jun 29 05:58:02 2000 0.000000 seconds	Set Hardware Clock from Local
Set Hardware Clock, YYYY-MM-DD hh:mm:ss	2000-06-29 07:57:52	Set Hardware Clock Manually
Time Zone	CET-1CEST-2,M3.5.0/02:00:00,M10.5.0/03:00:00	Set Time Zone
Network Time Protocol (NTP)	192.168.10.1	Set NTP

4. Configure the internal clock as best suits your site

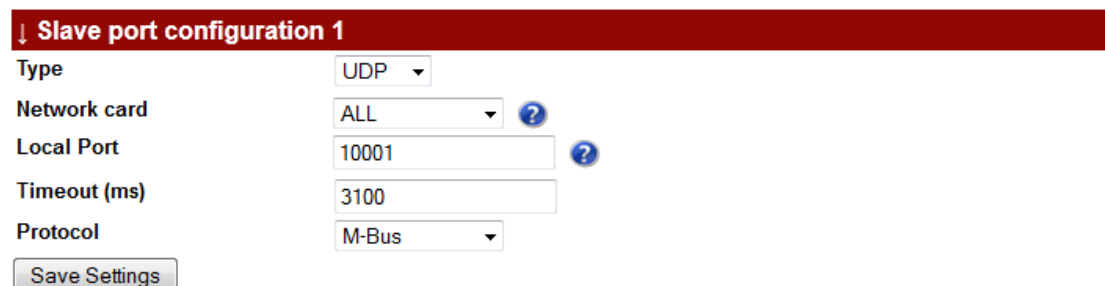
4. Configure an M-Bus ASCII project

This section will describe how to configure an M-Bus ASCII protocol in PiiGAB M-Bus Explorer to read the internal meter in PiiGAB M-Bus 900.

4.1 Configure slave port 1 for M-Bus communication

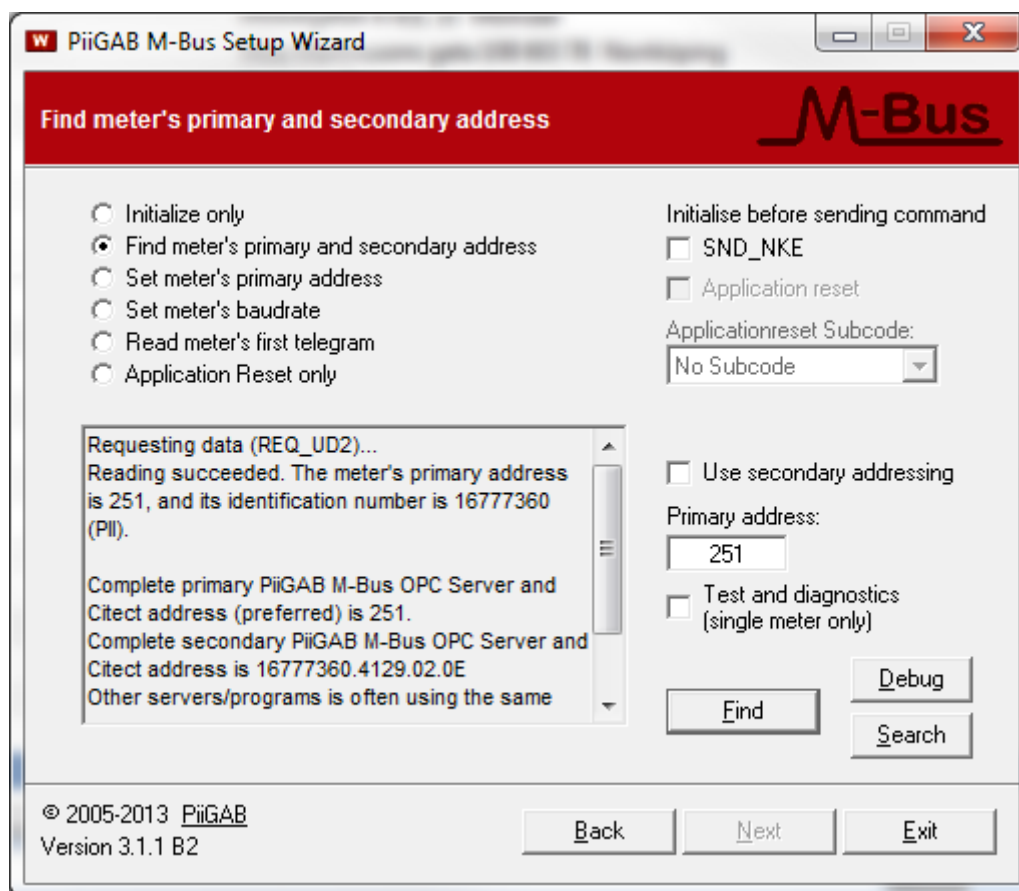
Slave port 1 can be used to read the internal meter inside your PiiGAB M-Bus 900.

1. Open PiiGAB M-Bus 900's web interface.
2. Click on *Configuration*.
3. Click the *Slave port 1* tab.
4. Configure slave port 1 as the picture below.



5. Press *Save Settings* button.

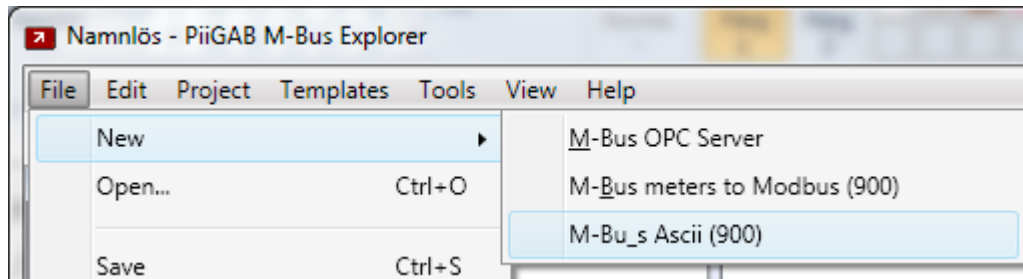
Slave port 1 is now configured for M-Bus communication. You can read the internal meter in *PiiGAB M-Bus Setup Wizard* with primary address 251.



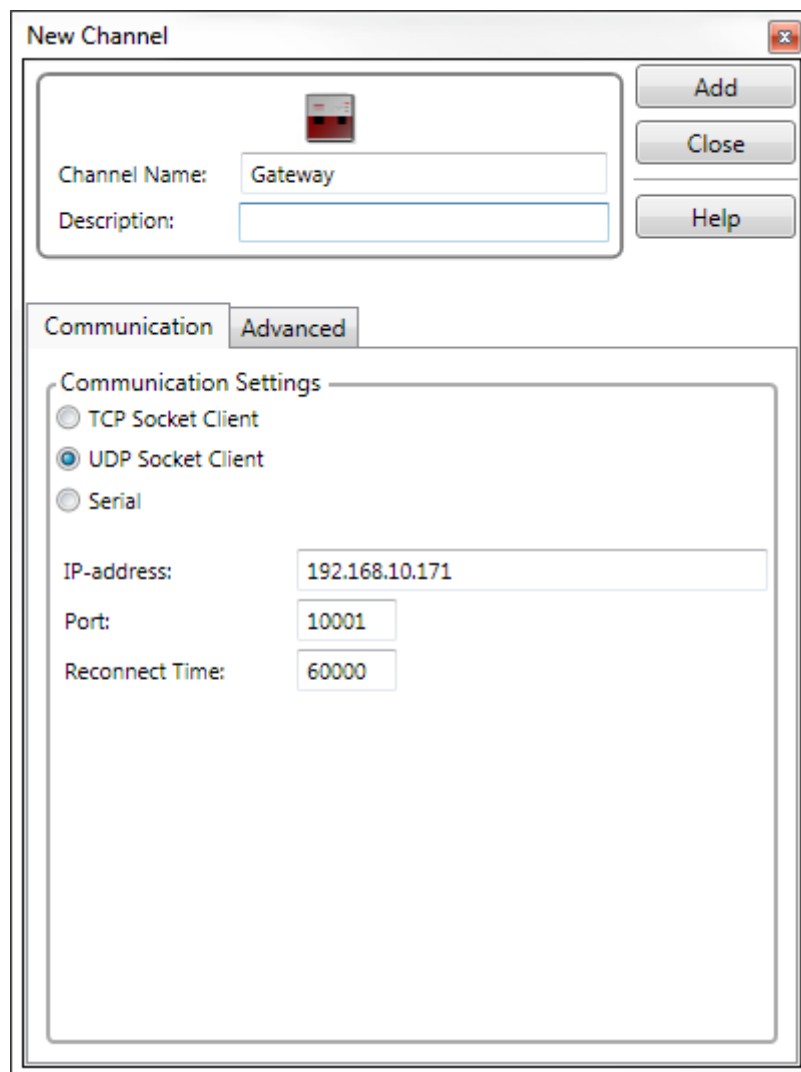
4.2 Configure PiiGAB M-Bus Explorer for M-Bus ASCII

The internal meter inside PiiGAB M-Bus 900 contains of M-Bus voltage, M-Bus current, serial number and error flags. The voltage, current and serial number can be used to represent actual values from an M-Bus meter.

1. Start *PiiGAB M-Bus Explorer*.
2. Create a new M-Bus ASCII project.



3. Create a new channel and configure it as the picture below.



Note:

Your PiiGAB M-Bus 900's IP-address may be something different than the example.

4. Create a new meter and configure it as the picture below.

New Device

Device Name:

Description:

Channel Name:

Group Name:

Address **Advanced**

Address Settings

☒ Primary Address

☐ Secondary Address

Identification Number:

Manufacturer ID:

Version ID:

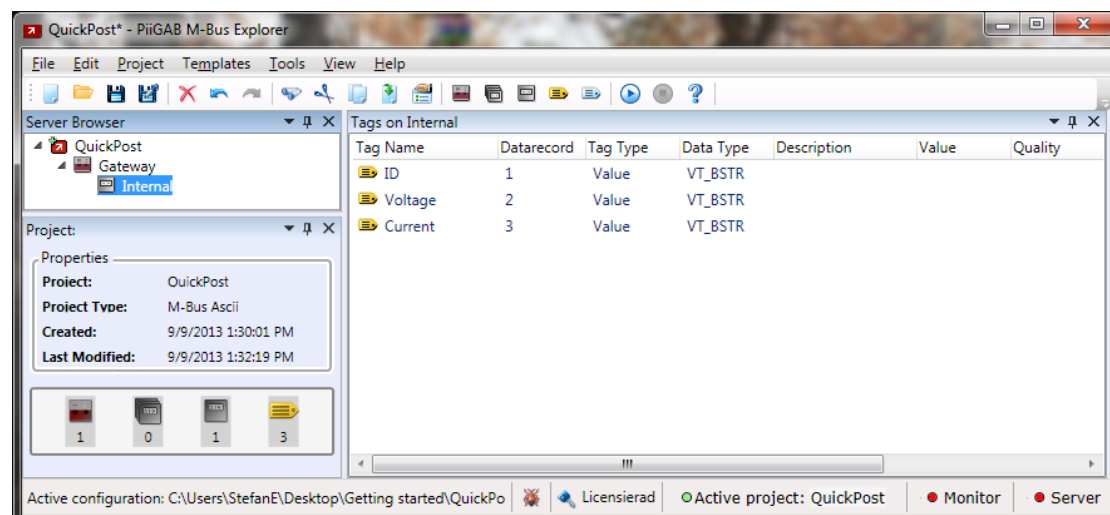
Device type:

Add Close Help

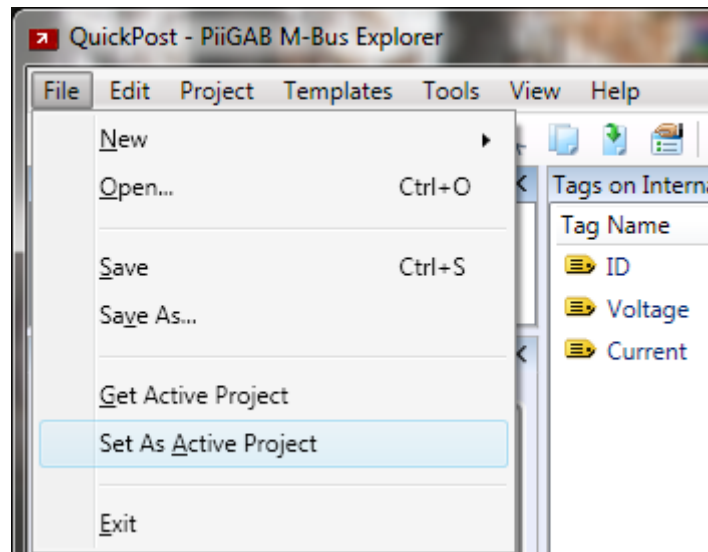
5. Create three tags in the meter. The specifications for the tags are.

Name	Data record	Tag type	Data type
ID	1	Value	VT_BSTR
Voltage	2	Value	VT_BSTR
Current	3	Value	VT_BSTR

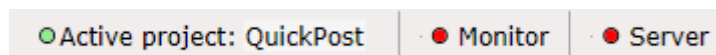
The configuration of the three tags should be as the picture below




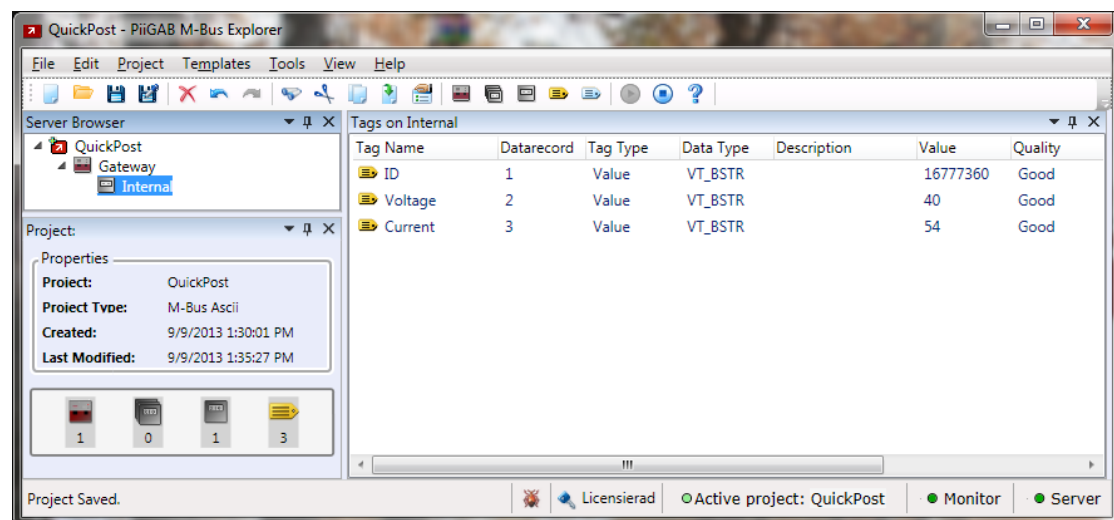
- Set the project as active project.



- Make sure the project is the active project and the server indication is steady red.



- Save the project.
- Start the monitor function by pressing the  button.
- Wait for *Quality* cell for each tag to change to *Good*.



Note:

If you don't have quality *Good* on your OPC-tags then you have some configuration errors. See over primary address, IP-address, port number and protocol. You can also test the communication with *PiiGAB M-Bus Setup Wizard*.

If you receive values, similar as the picture above, you have a working M-Bus ASCII project ready for QuickPost.

5. Configure PiiGAB M-Bus 900 for QuickPost

This section will describe how to configure the master port and slave port 2 for QuickPost. To configure the QuickPost software please see section 6. *Configure QuickPost*.

5.1 Upload the M-Bus ASCII CSV-file to the PiiGAB M-Bus 900

1. Open PiiGAB M-Bus 900's web interface.
2. Click on *Configuration*.
3. Go to the *Upload CSV-file* section.

Upload CSV-File

Ingen fil är vald.

4. Press the *Browse (Bläddra...)* button and browse to the *M-Bus ASCII CSV-file* on your computer. The file is located in the same folder where you created the M-Bus ASCII project in PiiGAB M-Bus Explorer.
5. Press the *Upload* button to upload the file into the gateway.

5.2 Configure master port

The CSV-file, uploaded in section 5.1, must be bound to the master port.

1. Open PiiGAB M-Bus 900's web interface.
2. Click on *Configuration*.
3. Click the *Master port* tab.
4. Select the CSV-file you uploaded in section 4.1 in the *Configuration File* field.
5. Press *Save Settings* button.

Master port configuration

Type	Serial
Com port	M-Bus Master
Baud rate	2400 ?
Timeout (ms)	3000
Reconnect (s)	1000
Protocol	M-Bus
Configuration File	QuickPost.csv
<input type="button" value="Show Configuration"/>	
M-Bus Master options	
myprimaryaddress	251
switchblocktime	200
<input type="button" value="Save Settings"/>	

5.3 Configure slave port 2

One of the PiiGAB M-Bus 900's slave ports must be configured for M-Bus ASCII. Slave port 2 can be chosen for M-Bus ASCII since slave port 1 is already used for M-Bus communication. With this setup M-bus communication with PiiGAB M-Bus Explorer and other M-Bus clients goes through slave port 1 and M-Bus ASCII goes through slave port 2.

Note:

If you have a license which only enables one slave port you can use slave port 1 instead of slave port 2.

1. Open PiiGAB M-Bus 900's web interface.
2. Click on *Configuration*.
3. Click the *Slave port 2* tab.
4. Configure slave port 2 according to the picture below.
5. Press *Save Settings* button.

Configuration

↓ Slave port configuration 2

Type	UDP ▾
Network card	ALL ▾ ?
Local Port	10002 ?
Timeout (ms)	3100
Protocol	M-Bus Ascii ▾
M-Bus Ascii options	
stationid	0
<input type="button" value="Save Settings"/>	

6. Configure QuickPost

This will describe the basic of configure QuickPost. Make sure QuickPost is installed and you have license for QuickPost. Please see section 3. *Software and license*.

1. Open PiiGAB M-Bus 900's web interface.
2. Click on *QuickPost*.

Version 1.01.01

Configure

Log

List Files

File Name	<input type="text" value="my_filename"/>	
File Format	Siemens EMC ▾	
Remote HttpPost/Ftp URL	<input type="text" value="http://myhttppostserver.com"/>	
M-Bus ASCII Server IP	<input type="text" value="127.0.0.1"/>	UDP
M-Bus ASCII Server Port	<input type="text" value="10001"/>	
M-Bus ASCII Station Id	<input type="text" value="0"/>	
Read Timeout [s]	<input type="text" value="20"/>	
N Bad Reads	<input type="text" value="3"/>	
Configuration File	No File ▾	<div>Show Configuration</div>
Upload Method	HttpPost ▾	
Upload Time [HH:MM]	<input type="text" value="00:30"/>	(UTC)
Read Period [minutes]	<input type="text" value="1440"/>	
Read Offset [minutes]	<input type="text" value="0"/>	
Upload Period [minutes]	<input type="text" value="0"/>	
File Keep Time [Days]	<input type="text" value="7"/>	
User Name	<input type="text" value="my_username"/>	
Password	<input type="text" value="my_password"/>	
Enable QuickPost	Yes ▾	
Read & Upload at startup	Yes ▾	
<div>Save Settings and Restart QuickPost</div>		
<div>Restart QuickPost</div>		

3. All fields must be specified for the QuickPost to work properly.

These are the sections to configure. Please see next page for description of all sections.

- Remote server configuration
- M-Bus ASCII server configuration
- Readout configuration
- Upload configuration

4. Use the *Enable QuickPost* switch to either enable or disable the QuickPost process.
5. Press *Save Settings and Restarts QuickPost*.

6.1 Remote server configuration

These fields are the remote server configuration.

Field	Description
Filename	The name of the file which will be sent to the remote server.
File Format	Select the data file format you would like the file to contain.
Remote HttpPost URL	URL address for the remote FTP- or HttpPost-server.
User name	The user name login for the remote server.
Password	The password for the user name login.

6.2 M-Bus ASCII server configuration

These are the fields where to acquire the M-Bus ASCII data from.

Field	Description
M-Bus ASCII Server IP	The PiiGAB M-Bus 900 with the M-Bus ASCII slave port.
M-Bus ASCII Server Port	The slave port of that PiiGAB M-Bus 900 which is set to M-Bus ASCII.

Note:

Normally the *Server IP* is set to *127.0.0.1*, and *Server Port* to the port whichever slave port was configured for M-Bus ASCII. This will cause the QuickPost software to acquire the M-Bus ASCII data from the PiiGAB M-Bus 900 itself.

You can also use another PiiGAB M-Bus 900 with a slave port for M-Bus ASCII which the QuickPost acquires the data from.

6.3 Readout configuration

These are the fields for the readout of the M-Bus meters.

Field	Description
Read timeout	Timeout for receiving data from the M-Bus ASCII server.
N Bad Reads	Numbers of retries of readout.
Configuration file	An M-Bus ASCII file containing which M-Bus meter to read.
Read period	How often the readout of the M-Bus meters.
Read offset	An offset for the read period.

Note:

The *Configuration File* is usually the same file as specified as configuration file for the master port, see section 5.2. But it can be another as long as the configuration of QuickPost's configuration file exists in the master port's configuration file.

6.4 Uploading configuration

These are the fields for uploading the files to the remote server.

Field	Description
Upload Method	Either FTP or HttpPost.
Upload Time	Time of day to upload. 0 as value will let Upload period decide.
Upload period	Time between file upload. 0 as value will let Upload Time decide.
File Keep Time	Numbers of days the files will exist in the PiiGAB M-Bus 900.

Note:

If *Upload Time* is set to 0 the *Upload Period* will upload the file in periods at specified time.

If *Upload period* is set to 0 the *Upload Time* will upload the file once a day at specified time.

7. Test with PiiGAB's FTP-server

You may test your configuration to PiiGAB's public FTP-server.

1. Please configure the QuickPost as the picture below:

Version 1.01.01

Configure

Log

List Files

File Name	<input type="text" value="QuickPost"/>	
File Format	<input type="text" value="Siemens EMC"/>	
Remote HttpPost/Ftp URL	<input type="text" value="ftp://www29.fsddata.se/"/>	
M-Bus ASCII Server IP	<input type="text" value="127.0.0.1"/>	UDP
M-Bus ASCII Server Port	<input type="text" value="10002"/>	
M-Bus ASCII Station Id	<input type="text" value="0"/>	
Read Timeout [s]	<input type="text" value="20"/>	
N Bad Reads	<input type="text" value="1"/>	
Configuration File	<input type="text" value="QuickPost.csv"/>	<div>Show Configuration</div>
Upload Method	<input type="text" value="Ftp"/>	
Upload Time [HH:MM]	<input type="text" value="0"/>	(UTC)
Read Period [minutes]	<input type="text" value="1"/>	
Read Offset [minutes]	<input type="text" value="0"/>	
Upload Period [minutes]	<input type="text" value="1"/>	
File Keep Time [Days]	<input type="text" value="7"/>	
User Name	<input type="text" value="piigab-quickpost"/>	
Password	<input type="text" value="quickpost"/>	
Enable QuickPost	<input type="text" value="Yes"/>	
Read & Upload at startup	<input type="text" value="Yes"/>	

Save Settings and Restart QuickPost

Restart QuickPost

2. Press the *Save Settings and restart QuickPost* button.

This should read the internal meter each minute and upload the result in a separate file to the FTP-server.

You may use any FTP-client to connect to the FTP-server and check that your file has been sent.

8. Appendix

8.1 Contacts

PiiGAB Processinformation

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