

HOW TO CONNECT RESI MODBUS-MBUS MODULE TO ASPECT

This document describes how to connect the **RESI Modbus to Mbus gateway Module** to an **Aspect-MatrixMax** controller.

System Browser

Name	Value	Display
Energy	18953.2Wh	<input checked="" type="checkbox"/>
FlowTemp	15.2°C	<input checked="" type="checkbox"/>
ReturnTemp	35.3°C	<input checked="" type="checkbox"/>
DeltaTemp	20.2°C	<input checked="" type="checkbox"/>
Volume	10.2m3	<input checked="" type="checkbox"/>
Power	0.0W	<input checked="" type="checkbox"/>

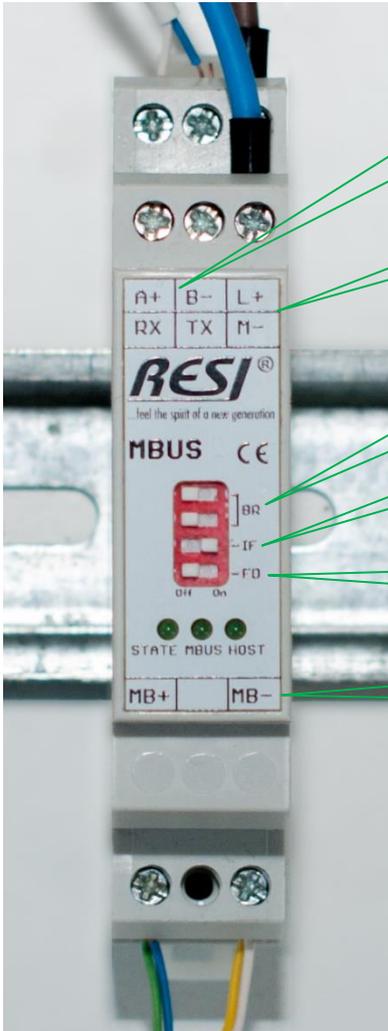
In order to connect to the **RESI** module you will need the following:

1. **RESI** Module
2. **RS232** or **USB-to-RS485** converter
3. **RESI MODBUS Configurator** (the version used when creating this document was 1.0.5.30) – This software can be downloaded from www.resi.cc (you need to be registered to access full download page)
4. **RESI-USB-SIO,RESI-USB-BOX-DRIVER** - This software can be downloaded from www.resi.cc (you need to be registered to access full download page).

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WIRING THE RESI MODULE

Wire the **RESI** module according to documentation available on Internet or in the datasheet sent with device.



DIP Switch Setup

BR – Baud rate

DIP 1	DIP2	Baudrate
OFF	OFF	9600 bps
ON	OFF	19200 bps
OFF	ON	38400 bps
ON	ON	57600 bps

Note: Parity is selected with **RESI MODBUS Configurator** software only

IF – Interface

OFF	RS232
ON	RS485

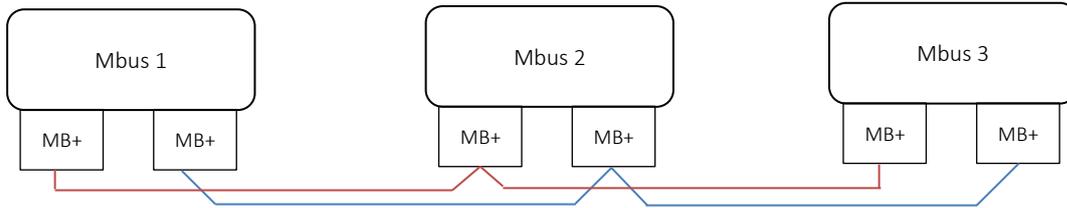
FD – Function Definition

OFF	The unit ID(address) from FLASH memory used(configurable in Mdbus Configurator Software)
ON	The unit ID (address) 255 is set

Mbus interface connections do not require polarity matching.

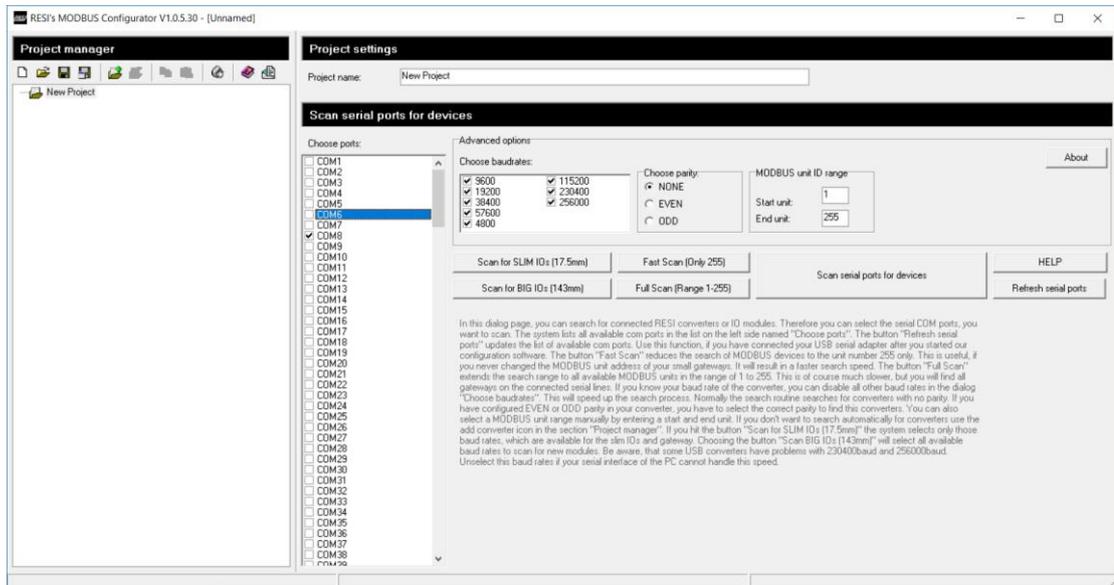
CONNECTING MBUS METERS

Connect all your Mbus meters in daisy chain. Use the same M+ and M- ports on all Mbus devices.

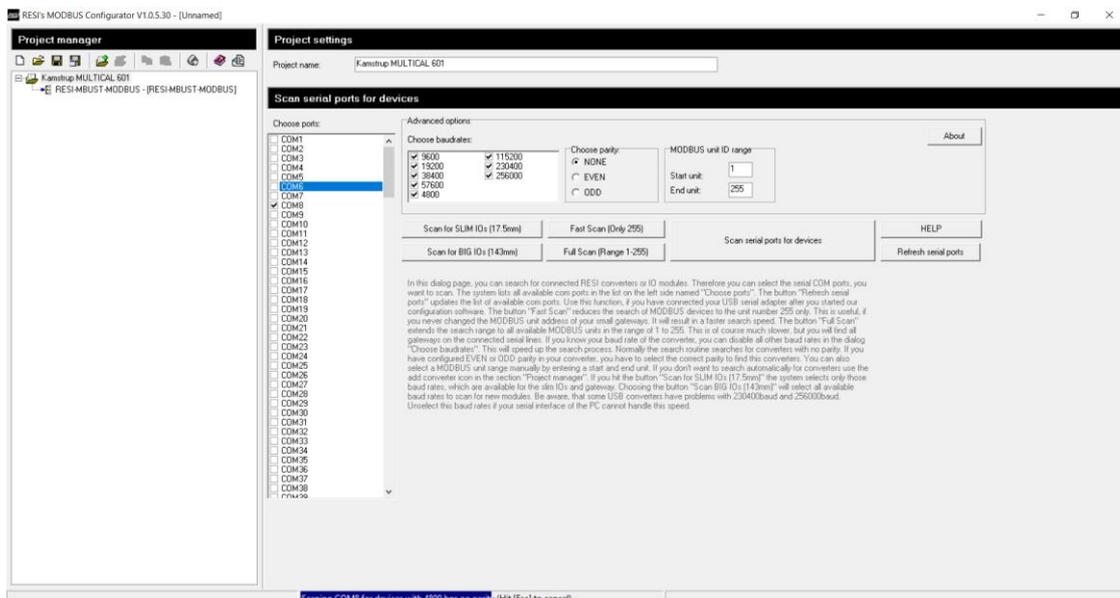


DISCOVERING THE RESI MODULE IN THE MODBUS CONFIGURATOR

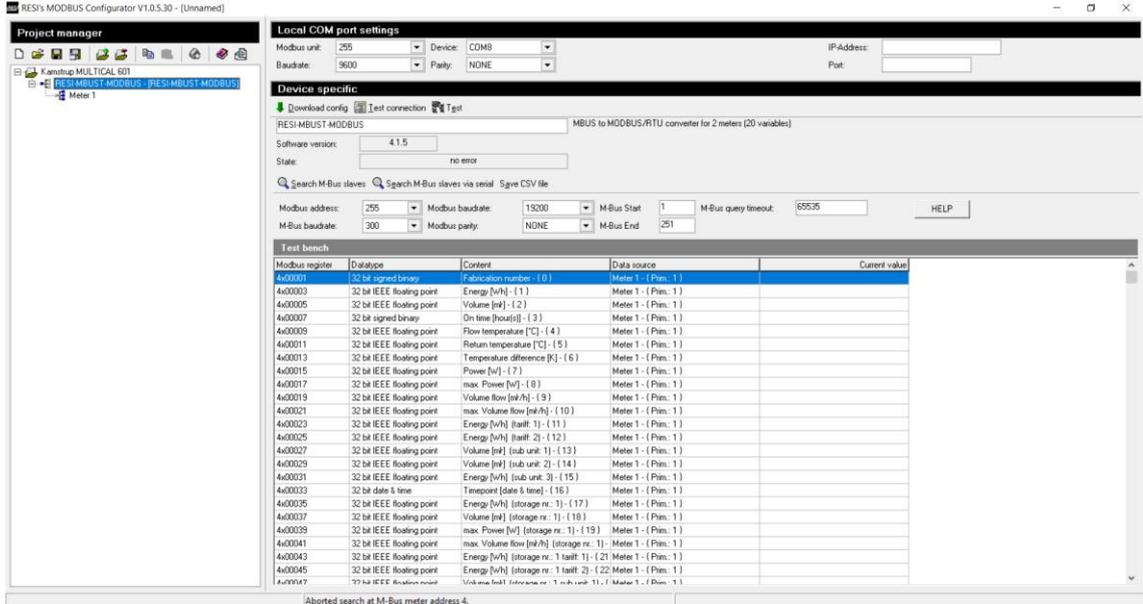
1. Run the **RESI MODBUS Configurator** application, and configure your com port connection



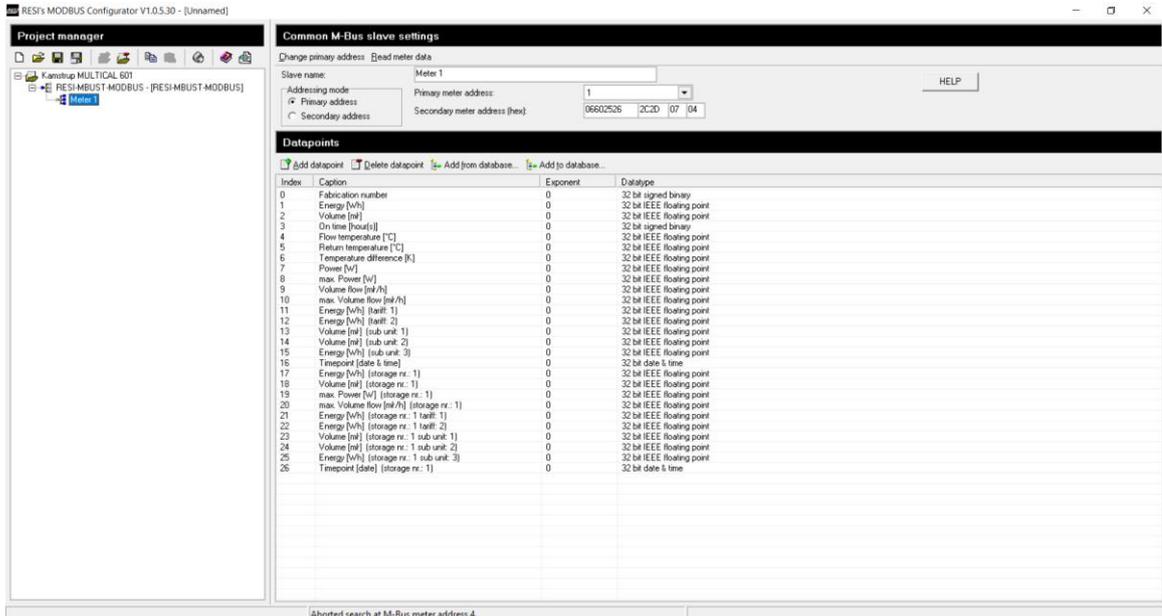
2. Name your new project and click **Scan serial ports for Devices**.



3. Select the discovered **RESI** module and click **Search M-Bus slaves** (press the ESC button to stop scanning)

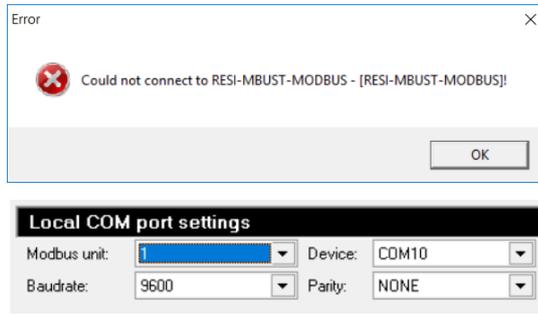


4. Select your discovered meter to see the available registers

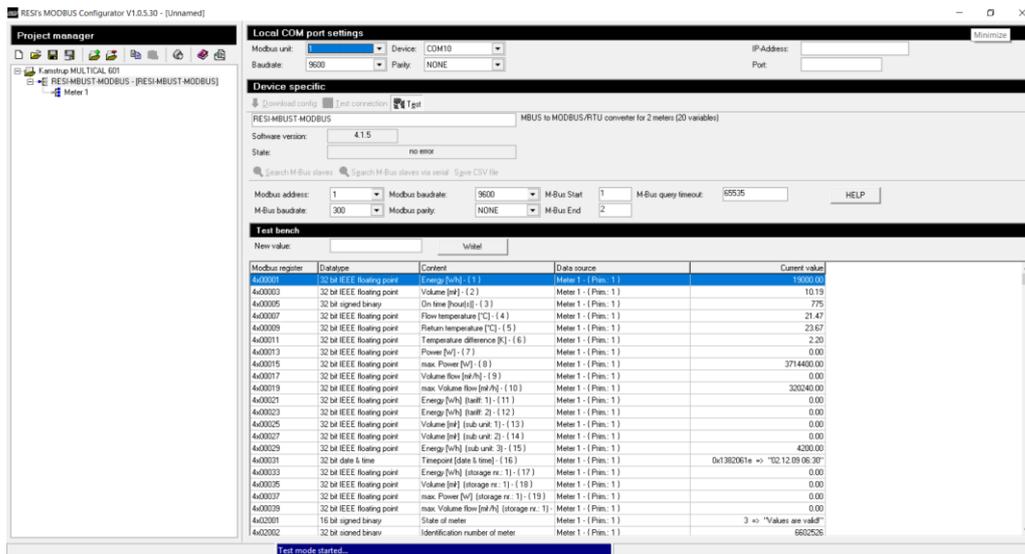


5. Depending on the type of **RESI** module, it might be necessary to delete data points from the database (this device can have 2 Mbus devices with up to 20 data points)
6. Click on the **RESI** module in left pane, set the **Modbus** port settings and set the **Mbus** communication speed, start address and end address.

- Click **Download Config** – after the configuration is loaded successfully, the **Modbus unit** address in **Local COM port Settings** will automatically change to 255. If you try to test the connection you will get an error. Make sure that you change your local **Modbus port's COM Port** settings to the correct one on the device now.



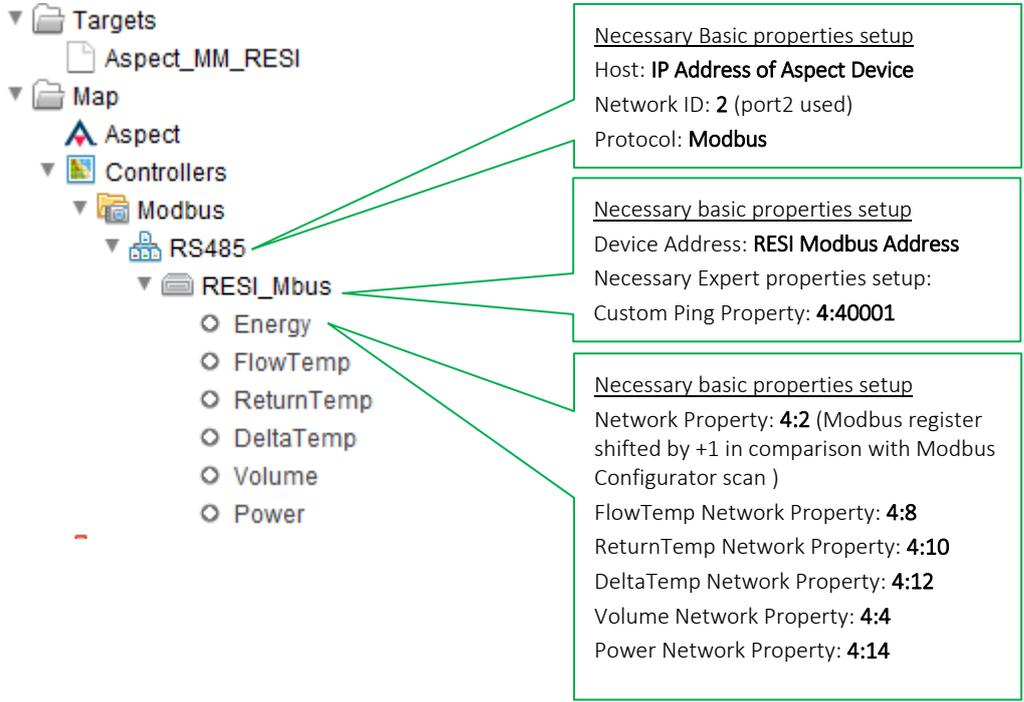
- Click on **Test** to scan for Mbus meter values



If you can see values then your **RESI** module has been set up correctly with the **Mbus** meter. Use **Modbus Port settings** and register numbers to read them in Cylon controllers.

ADDING MBUS READINGS IN ASPECT

In order to read the **Mbus** meter readings in **Aspect**, you must configure the **Modbus** port on your **Aspect** device according to **RESI** module setup.



MODBUS CABLING WITH MATRIXMAX

The image below shows a wiring diagram for properly connecting a **RESI** module to a **MatrixMax** controller on Port 2.

- Connect **A+** from **RESI** module to **N+** of the **MatrixMax**.
- Connect **B-** from the **RESI** module to **N-** on the **MatrixMax**

