

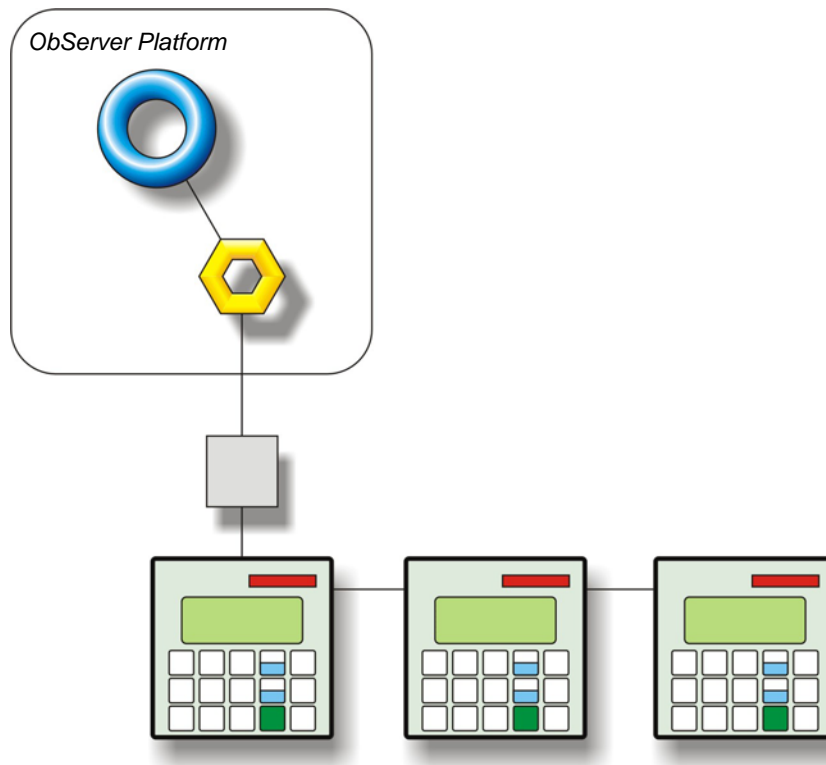
# Product Engineering Guide

## OSM v20 AutomtrEVO v10

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### Introduction

The *AutomtrEVO* OSM links a network of Autometers EVO IC Harmonic Analysers fitted with the MODBUS communications cassette to ObServer. Up to 32 power meters can be accessed from the OSM. Information available from each Autometers EVO IC Harmonic Analysers includes VT ratios, NT ratios, voltage details, apparent power, and harmonic details and total system.



### Supported Range

- Autometers EVO IC Harmonic Analysers – fitted with the modbus cassette set to 2 wire RTU and the baud rate set to 9600
- The AutomtrEVO driver is compatible with EVOIC3, IC990, IC7, IC9; and existing installations of IC970 (prior to 2009). Starting with the IC200 meter and new installs of the IC970, Autometers will be compatible with our standard JBus driver.

### Notes

The Autometer system does not report alarms to ObServer. If alarms are needed then an AlarmGen device will be required.

The Autometer system does not provide logging facilities to ObServer. If logging of values is needed then a Data Manager application will be required.

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## Engineering

### **Step 1 – Install OSM**

The AutomtrEVO OSM is installed automatically with all ObSys editions. Refer to the 'ObSys CD sleeve' for details on how to install ObSys.

### **Step 2 – Configure Autometers MODBUS Cassettes**

Configure each of the Autometers MODBUS cassettes using the switch block located on the rear of the cassette. Each cassette should have a unique address. The configuration of the Autometers modbus cassette include the following settings:

Baud Rate:	9600
Protocol:	Modbus
Wire Mode:	2 Wire mode (not 4 wire)
Modbus Type:	RTU (not ASCII)
Parity:	n/a
Format Mode:	ASCII (not floating point)

### **Step 3 – Connect COM Port to Autometers System**

Using cable, connect the Autometer network to a COM port of the PC. Refer to the section 'Cable' below for details of the cable.

### **Step 4 – Plug in AutomtrEVO OSM to ObServer**

Use object engineering software to locate the ObServer Setup object. Assign the AutomtrEVO OSM to an available channel. Refer to '[ObServer v20 Application Engineering Guide](#)'.

Note: After inserting the OSM, your engineering software may need to re-scan the ObServer object in order to view the OSM.

### **Step 5 – Configure AutomtrEVO OSM**

The COM port, baudrate and alarm destination are configured using objects. Use object engineering software to view and modify the module objects within the OSM.

### **Step 6 – Access Objects within the Autometers System**

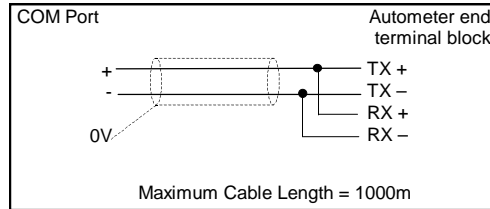
Values from the Autometers system are made available as objects from ObServer. Any object software that is connected to the ObServer can access these objects.

# Engineering Reference

## Cable Specification

The Autometers network is connected to ObServer using a RS232 to RS485 converter. The COM port is connected to the converter, which is then connected to the network. The earthing screen or braid of the RS485 cable should be connected **as close as possible** to the 0V terminal at one end only. **Do not connect the earthing braid of a single cable run to more than one unit, be it converter or device.**

The cable between COM port and the Autometers network is as follows:



## Objects

When the OSM is loaded the following objects are created within ObServer, use object software to access these objects.

Object <sup>[1]</sup>	Label	R/W	Type
Sc	Autometers System connected to channel c	-	[Autometers\EVO] <sup>[2]</sup>
Mc	AutomtrEVO Module connected to channel c	-	[OSM v20\AutomtrEVO v10]

### Notes

- [1] The ObServer channel number, c, is a number in the range 1...40.
- [2] This object has a variable content and as such requires scanning.