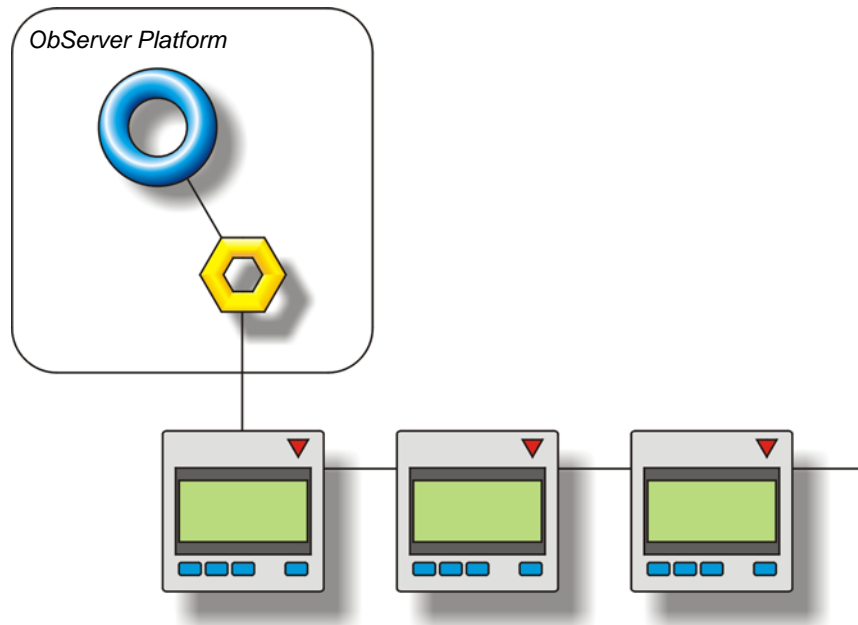


Product Engineering Guide

OSM v20 CarloGavazzi v10

Introduction

The CarloGavazzi OSM links a network of Carlo Gavazzi WM3-96 Smart Quality Power Analyzers to Observer. The power analyzers provide harmonic distortion analysis up to the 50th harmonic for voltage and current, as well as instantaneous phase and system values and alarm statuses.



Supported Range

- Carlo Gavazzi WM3-96 Smart Quality Power Analyzer.

Notes

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

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

Engineering

Step 1 – Install OSM

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

Step 2 – Configure Carlo Gavazzi Units

Configure each of the Carlo Gavazzi units using the Serial Output option from the Main Menu. Select Select Serial Output using the arrow keys and confirm it with 'S'. For each unit, ensure they all have the same baud rate and parity configured, 9600 baud and no parity is recommended. Also, ensure each unit has a unique address.

Step 3 – Connect COM Port to Carlo Gavazzi Units

Using cable, connect the Carlo Gavazzi units to a COM port of the PC. Refer to the section 'Cable' below for details of the cable.

Step 4 – Plug in CarloGavazzi OSM to ObServer

Use object engineering software to locate the ObServer Setup object. Assign the CarloGavazzi 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 CarloGavazzi OSM

The COM port, baudrate, byte format, alarm polling facilities, 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 Carlo Gavazzi System

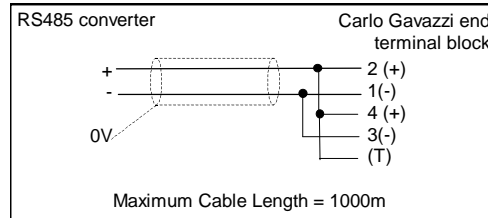
Values from the Carlo Gavazzi system are made available as objects from ObServer. Any object software that is connected to the ObServer can access these objects.

Engineering Reference

Cable Specification

The Carlo Gavazzi system 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 the RS232 to RS485 converter and the Carlo Gavazzi system is as follows:



Objects

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

Object ^[1]	Label	R/W	Type
Sc	Carlo Gavazzi System connected to channel c	-	[CarloGavazzi v10] ^[2]
Mc	CarloGavazzi Module connected to channel c	-	[Osm v20\CarloGavazzi 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.