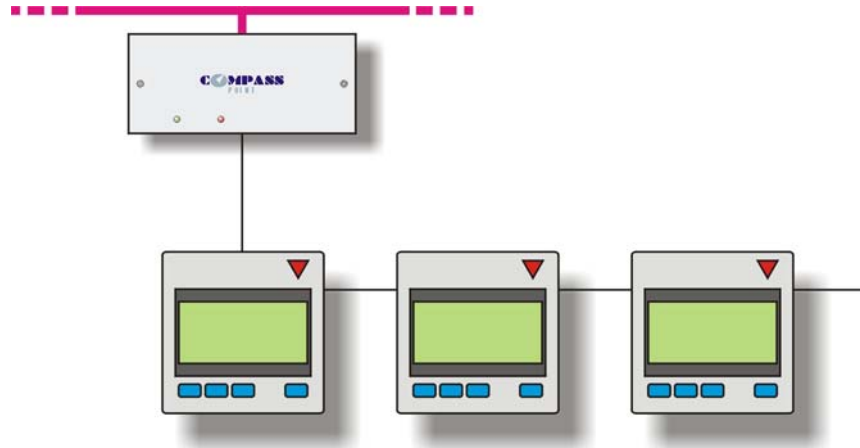


Product Engineering Guide

Compass v22 CarloGavazzi v10 RS485

Introduction

The CarloGavazzi Compass Point links a network of Carlo Gavazzi WM3-96 Smart Quality Power Analyzers to the Compass Network. 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 Compass. If alarms are needed then an AlarmGen device will be required.

The Carlo Gavazzi system does not provide logging facilities to Compass. If logging of values is needed then a LogMax device will be required.

Engineering

Step 1 – Mount the Compass Point

Refer to the 'Mounting' section within the '[Compass Point MRTC485 Installation Guide](#)' document for details on how to mount the Compass Point securely to a wall or within a cabinet.

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 Compass Point to Carlo Gavazzi Units

Using cable, connect the Carlo Gavazzi system to the RS485 terminal block of the Compass Point. Refer to the section 'Cable' below for details of the cable.

Step 4 – Apply Power to the Compass Point

Refer to the 'Power' section within the '[Compass Point MRTC485 Installation Guide](#)' document. Once power is applied, the green LED should be lit continuously to show that the Compass Point is working correctly on the Compass Network.

Step 5 – Configure the CarloGavazzi driver within Compass Point

The baud rate, byte format and device number are configured using objects. Use object engineering software to view and modify the objects within the Compass Point.

Step 6 – Access Objects within the Carlo Gavazzi Units

Values from the Carlo Gavazzi units are made available as objects on the Compass Network. Any object software that is connected to the Compass Network can access these objects.

The red LED near the RS485 port of the Compass pulses when a valid message is transmitted or received by the Compass Point.

Step 7 – Configure the Transfers within the Compass Point

Compass Point transfers are also configured using objects. Refer to the '[Introduction to Compass Transfers](#)' document for more details.

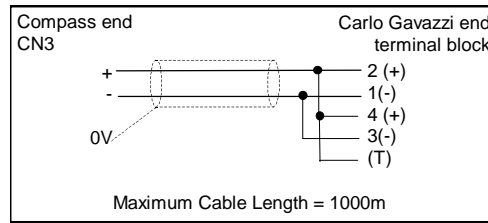
Step 8 – Configure the Alarm Handling within the Compass Point

Compass Point alarm handling is also configured using objects. Refer to the '[Introduction to Compass Alarms](#)' document for more details.

Engineering Reference

Cable Specification

The cable between the Compass Point and the Carlo Gavazzi network is as follows:



The earthing screen or braid of the 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 Compass Point or device.**

Objects

When the Compass Point is powered-up the following objects are created on the Compass Network, use object software to access these objects.

Object	Label	R/W	Type
$Dn^{[1]}$	Carlo Gavazzi System	-	[CarloGavazzi v10] ^[2]
$Pp^{[3]}$	CarloGavazzi Compass Point	-	[Compass v22\CarloGavazzi v10]

Notes

- [1] The Device Number, n , is a number in the range 0...63.
- [2] This object has a variable content and as such requires scanning.
- [3] If the Compass Point has its device number configured the Point address, p , is a number in the range 1...63. If no device number is set the Point address, p , is the Compass Point serial number in the range 1000000...99999999