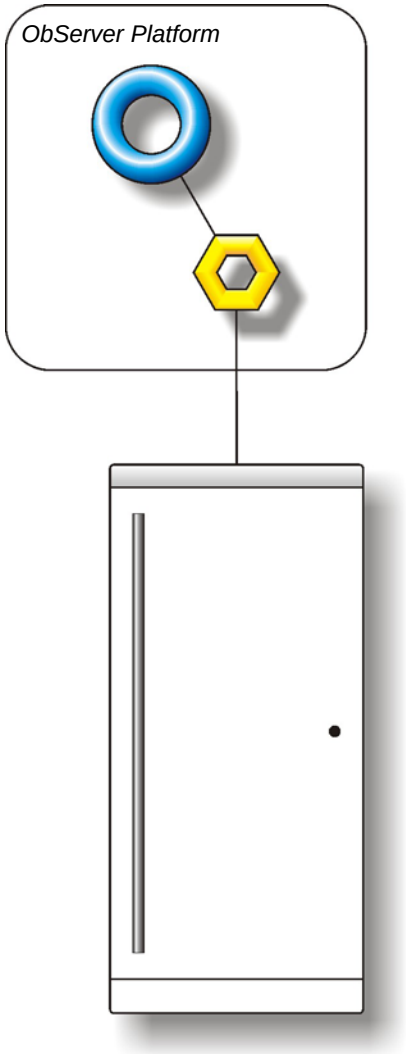
Product Engineering Guide

OSM v20 Powerwve v10

Introduction

The Powerwve OSM links an Uninterruptible Power Supplies ltd Powerwave Uninterruptible Power Supply (UPS) to ObServer. The UPS can provide values including input voltages, output voltages, currents, power, frequency and various battery properties.



Supported Range

- Powerwave 2000 series (aka Primewave) - 4.5kVA to 10 kVA single phase output
- Powerwave 3000 (shown in diagram) series (aka Powerwave) - 7.5kVA to 20 kVA single phase output
- Powerwave 5000 series (aka Ecowave) - 40kVA to 60 kVA three phase output

Notes

Only the 40kVA and 60kVA units from the Powerwave 5000 series are compatible with the driver. All other Powerwave 5000 require separate protocols.
There are several different UPS models, and not all commands may work with all models.
The Powerwave UPS does not report alarms to Compass. If alarms are needed then an AlarmGen device will be required.
The Powerwave UPS does not provide logging facilities to Compass. If logging of values is needed then a LogMax device will be required.

Engineering

Step 1 – Install OSM

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

Step 2 – Configure Powerwave UPS

The Powerwave UPS does not require configuration.

Step 3 – Connect COM Port to Powerwave UPS

Using cable, connect the Powerwave UPS to a COM port of the PC. Refer to the section ‘Cable’ below for details of the cable.

Step 4 – Plug in Powerwave OSM to ObServer

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

The COM port, baud rate, unit type, device label, alarm polling facilities, and alarm destination are configured using objects. Use object engineering software to view and modify the module objects within the OSM.

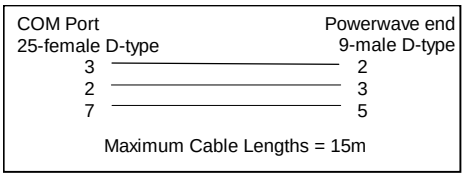
Step 6 – Access Objects within the Powerwave UPS

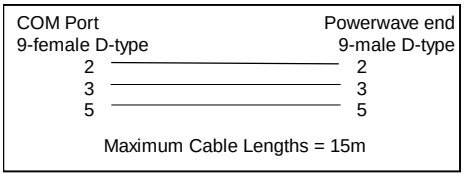
Values from the Powerwave UPS are made available as objects from ObServer. Any object software that is connected to the ObServer can access these objects.

Engineering Reference

Cable Specification

The cable between COM port and the Powerwave UPS 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***
S*c*	Powerwave System connected to channel *c*	-	*[Powerwve v10]* [2]
M*c*	Powerwave Module connected to channel *c*	-	*[OSM v20\Powerwve 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.