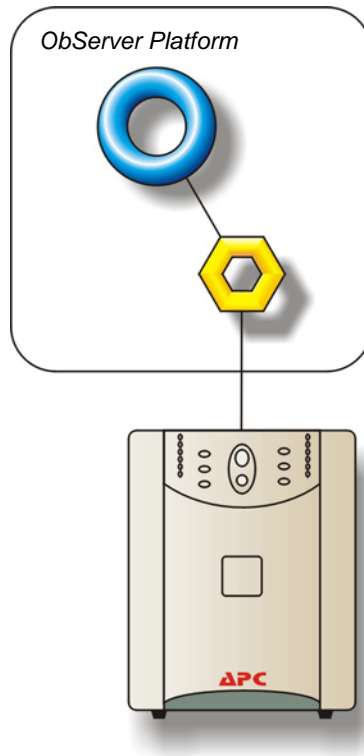


Product Engineering Guide

OSM v20 APC v10

Introduction

The APC OSM links American Power Conversion's Uninterruptible Power Supply (UPS) range using the UPS-Link communications protocol, to the ObServer. A user can send various types of commands to an APC UPS, such as control commands (turn on/off, test mode, shutdown), status inquiry commands (run-time remaining, manufacturer info, test results), and power inquiry commands (current, power, voltages).



Supported Range

- Smart-UPS 250
- Smart-UPS 400, UPS 370ci
- Smart-UPS 600
- Smart-UPS 900
- Smart-UPS 1250
- Smart-UPS 2000
- Matrix -UPS 3000
- Matrix -UPS 5000
- Smart -UPS 450
- Smart -UPS 700
- Smart -UPS 1000
- Smart -UPS 1400
- Smart -UPS 2200
- Smart -UPS 3000
- Smart -UPS 3000

Notes

There are several different UPS models, and not all commands may work with all models.

The APC UPS can report alarms to ObServer.

The APC UPS does not provide logging facilities to ObServer. If logging of values is needed then a LogMax device will be required.

Engineering

Step 1 – Install OSM

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

Step 2 – Configure APC UPS

The APC UPS does not require configuration.

Step 3 – Connect COM Port to APC UPS

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

Step 4 – Plug in APC OSM to ObServer

Use object engineering software to locate the ObServer Setup object. Assign the APC OSM to an available channel. Refer to 'ObServer v10 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 APC OSM

The COM port, 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 APC UPS

Values from the APC 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 APC UPS is as follows:

| COM Port 25-female D-type | APC direct connection 9-male D-type |
|------------------------------|--|
| 2 | 1 |
| 3 | 2 |
| 7 | 9 |

Maximum Cable Lengths = 15m

| COM Port 25-female D-type | APC supplied cable end 9-male D-type |
|------------------------------|---|
| 2 | 3 |
| 3 | 2 |
| 7 | 5 |

Maximum Cable Lengths = 15m

| COM Port 9-female D-type | APC direct connection 9-male D-type |
|-----------------------------|--|
| 2 | 2 |
| 3 | 1 |
| 5 | 9 |

Maximum Cable Lengths = 15m

| COM Port 9-female D-type | APC supplied cable end 9-male D-type |
|-----------------------------|---|
| 2 | 2 |
| 3 | 3 |
| 5 | 5 |

Maximum Cable Lengths = 15m

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 | APC System connected to channel c | - | [APC v10] ^[2] |
| Mc | APC Module connected to channel c | - | [OSM v20\APC 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.