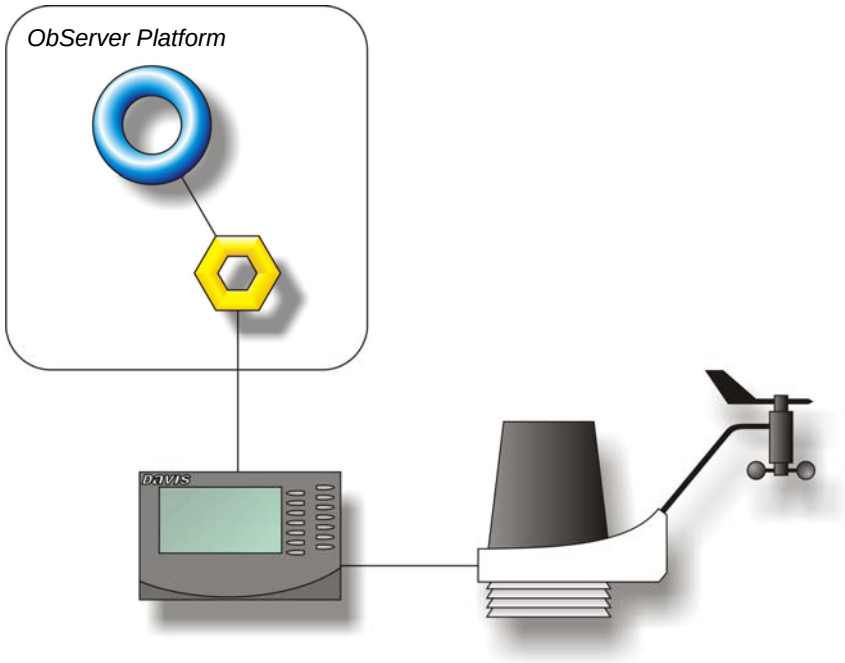
Product Engineering Guide

OSM v20 DavisWeather v10

Introduction

The DavisWeather OSM links a Davis Instruments Vantage Pro2 weather station to ObServer.

The weather station provides forecast information, barometer, temperature, humidity, sun, wind and rain data. The data includes current readings, daily high/low, monthly high/low and yearly high/low.



Supported Range

Davis Instruments Vantage Pro2 weather station – single station wired or wireless with serial adapter (RS232).

Notes

The Vantage Pro2 weather station does not send alarm events to ObServer. Instead values may be monitored using the UserData or AlarmGen modules.

The Vantage Pro2 weather station does not provide logging facilities to ObServer. If historical data is required then values may be monitored using the UserData module or the ObSys Data Manager application.

Engineering

Step 1 – Install OSM

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

Step 2 – Configure Davis Vantage Pro2 System

Attach the data logger module and serial (RS232) adapter to the Vantage Pro2 console. The console should also be powered by the adapter supplied rather than by battery.

Use the console to configure the weather station. Configuration settings include the serial baud rate and units of measure.

Note: The OSM will be unable to communicate with the weather station when it is in setup mode. If the units of measure are adjusted at a later date then OSM should be reset.

Step 3 – Connect COM Port to Vantage Pro2 System

Using the cable provided, connect the Vantage Pro2 console to a COM port of the PC.

Step 4 – Plug in DavisWeather OSM to ObServer

Use object-engineering software, such as ObView, to locate the ObServer Setup object. Assign the DavisWeather 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 the DavisWeather Interface within OSM

The COM port and RS232 baud rate are configured using objects. Use object engineering software, such as ObView, to view and modify the module objects within the OSM.

Step 6 – Access Objects within the Weather Station

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

Engineering Reference

Cable Specification

This cable between COM port and Vantage Pro2 console is provided with the weather station data logger module.

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	Weather Station connected to channel *c*	-	*[DavisWeather v10]*
Mc	Weather Station Module connected to channel *c*	-	*[OSM v20\DavisWeather v10]*

Notes

[1] The ObServer channel number, *c*, is a number in the range 1…40.

Engineering

Revision History

Version	Build Date	Details
1.0	01/07/2009	Driver released.