DATAHOG2
Using with the Delta T BF3 Sunshine Sensors

The DataHog is compatible with the Delta T BF3 Sunshine Sensor, but requires a specially configured input socket to record the 3 available outputs. This socket is configured as:

a) 0-2.5V for total solar radiation
b) 0-2.5V for diffuse solar radiation
c) 0-3.3 for sunshine status (for sunshine hours) where a value of 0 = no sunshine and 1 = sunshine
d) /F power supply to the sensor

The DataHog can be configured to record solar radiation in PAR µmol/m2/sec, or Energy watts/m2 or lux, please request preferred units required when ordering.

The total and diffuse solar radiation outputs are usually recorded as average measurements, e.g. the DataHog2's default setting is to record the average of 30 second "samples" at 30 minutes intervals.

The sunshine status can be recorded in several ways, according to user preference. The status is shown as a zero value for no sunshine and a value of 1 for sunshine.
a) An averaged reading of sunshine status, as described above for solar radiation intensity, will give an indication of the percentage of sunshine during the 30 minute period (e.g. a reading of 0.75 indicates the sun was shining for 75% of the time).
b) A "spot" recording will give the actual sunshine status at the time of measurement. For this the DataHog2's sample and logging intervals should be identical, e.g. 30 minute sample and 30 minute logging. Please note that the sunshine status between the 30 minute measurement will not be monitored in this case.
c) Log only full sunshine measurements. By using the DataHog2's "Log Above Threshold" function, it can be set to record only the sunshine status of 1 and ignore the zero readings (e.g. only log values above 0.9). A "spot" logging interval more frequent than 30 minutes is usually chosen as many zero measurement ill be ignored. Please note that choosing non equal logging intervals for different sensor channels can make data difficult to analyse in Excel as data may not always appear in the same columns. However this is not a problem when using Skye's SkyeLynx Deluxe software.

The BF3 sensor usually has internal batteries fitted. These are removed when connected to the DataHog, which supplies power directly to the sensor. The sensor is configured ready for use by Skye when supplied as a system with the DataHog.

The BF3 sensor is supplied with its own software & datalead for configuration, but its internal batteries need to be installed for connection to the PC. Please remember to remove the batteries again before reconnecting to the DataHog.