

**SKYE INSTRUMENTS LIMITED
LLANDRINDOD WELLS, UK**

MINIMET SENSOR SPECIFICATION

1) VECTOR WIND DIRECTION

Range: 0 to 360 °
Accuracy: $\pm 2^\circ$ obtainable in steady winds over 5 m/s
Threshold: 0.6 m/s
Max wind speed: >75 m/s
Operating range: -20 to + 70 ° C
Resolution: Sensor $\pm 0.2^\circ$, datalogger 5°

2) VECTOR WIND SPEED

Range: 0 to 75 m/s (145 knots)
Accuracy: 2% ± 0.1 m/s
Threshold: 0.3 m/s
Operating range: -30 to + 55 ° C
Resolution: Sensor 0.8m, datalogger better than 0.01 m/s

3) rht+ AIR TEMPERATURE

Range: -40 to + 60 ° C
Accuracy: $\pm 0.2^\circ\text{C}$ between 0 and 60°C
Sensor: Thermistor
Resolution: Sensor has an analogue output so its resolution is dependent on the datalogger, the datalogger resolution is better than 0.01°C

4) rht+ HUMIDITY

Range: 0-100% RH
Accuracy: $\pm 2\%$ RH
Sensor: Capacitor
Operating range: -40 to + 60 ° C
Resolution: Sensor has an analogue output so its resolution is dependent on the datalogger, the datalogger resolution is better than 0.01 %RH

5) RAINFALL

Resolution: 0.2 mm per tip
Accuracy: $\pm 5\%$ (24 to 36 mm/hr)

6) SOIL TEMPERATURE

Range: -20 to + 100 ° C
Accuracy: $\pm 0.2^\circ\text{C}$ at 0 to 60°C
Sensor: Thermistor
Resolution: Sensor has an analogue output so its resolution is dependent on the datalogger, the datalogger resolution is better than 0.01°C

7) SOLAR RADIATION

Range: 400-1100 nm
Operating range: -20 to + 70 ° C
Accuracy: $\pm 5\%$ traceable to UK Met Office
Resolution: Sensor has an analogue output so its resolution is dependent on the datalogger, the datalogger resolution is better than 0.01 w.m^{-2}

8) AIR PRESSURE

Range: 500 – 1050 mbar
Resolution: Better than 0.1 mbar
Accuracy: Absolute error @ 20°C and 1000mbar typically 0.5mbar (max 1 mbar). Error over 0-50°C typically 1.5mbar (maximum 3.6mbar)
Resolution: Sensor has an analogue output so its resolution is dependent on the datalogger, the datalogger resolution is better than 0.05 mbar