



MANUFACTURER SPECS: OMEGA OM-SQ2010 PORTABLE DATA LOGGER

No. of Analogue Channels: 8 single ended or 4 differential inputs. The OM-SQ2010 data logger has a single analogue to digital converter (A/D) which corresponds to inputs on blocks A and B. Each connection block will accept up to 2 differential inputs or up to 4 single ended inputs (it is not possible to mix single ended and differential inputs on a block).

Analogue Input Connections: Detachable screw terminal blocks

Channel Expansion: No

Universal Input: Yes

Voltage Ranges (Differential and Single Ended):

-6 to 25, -0.6 to 2.4, $\pm 0.3V$, -0.15 to 0.15, -0.075 to 0.075,

-6 to 12, -6 to 6, -3 to 3, -0.6 to 1.2, -0.6 to 0.6

Common Mode: 25 V

Current Ranges, Differential (Requires External 10 Ω Shunt):

4 to 20 mA, ± 30 mA

Thermocouple Ranges (Differential and Single Ended):

Type J: -200 to 1200°C (-328 to 2192°F)

Type K: -200 to 1372°C (-328 to 2502°F)

Type T: -200 to 400°C (-328 to 752°F)

Type N: -200 to 1300°C (-328 to 2372°F)

Type R: -50 to 1768°C (-58 to 3214°F)

Type S: -50 to 1768°C (-58 to 3214°F)

Resistance Ranges (All 2 Wire):

0 to 1250 Ω , 0 to 5000 Ω 0 to 20,000 Ω , 0 to 300,000 Ω

Thermistor Ranges:

U & UU-Type: -50 to 150°C (-58 to 302°F),

Y-Type: -50 to 150°C (-58 to 302°F)

S-Type: -30 to 150°C (-22 to 302°F)

User-Defined Thermistor: Enter Steinhart-Hart coefficients or RT pairs

Pt100/1000 (2-wire): -200 to 850°C (-328 to 1562°F)

A/D Resolution: 24 bit

Accuracy: See table on pdf data sheet

Internal Reference Temperature: -50 to 150°C (-58 to 302°F)

Pulse Count Ranges: 0 to 100 Hz (1 input); 0 to 64 kHz (1 input); 0 to 16,000,000 count

Digital State/Event Ranges: 8 state inputs or 1 x 8 bit binary

Digital/Alarm Outputs: 2 open drain FETs, 18V, 0.1A

Digital I/O Connections: DB25F connector

Clock Resolution/Accuracy: 1s/10 ppm Normal Mode - each input sampled at a max rate of 1 rdg per second

Double-Speed (Mains Reject Off) - One input can be sampled at 10 rdgs per second and all others are sampled at a max rate of 1 rdg per second

No of Intervals: 4

Data Scaling: Included in standard OM-SQ software

Data Statistics: Calculated within OM-SQ-SOFT-PLUS software

Calculated Channels: Up to 16

Memory Internal: 16 M (1 to 14 million readings)

Display/Keypad: 128 x 64 dot graphical display, 4 button keypad



Power: 2 C cells internal (included), or external 8 to 28 Vdc via AC adaptor and USB when plugged in

Battery Life: Up to 5 days with continuous usage while sampling all channels once per second

Sensor Power Output: 5 V at 50 mA, external 8 to 28V at 100 mA (when connected)

Networking: Via RS-232 to Ethernet adaptor (Model No. OM-SQ-NET-ADAP)

Modem Support : Via RS-232 modem (GSM modem kit Model No. OM-SQ-GSM-KIT)

PC Setup: Complete data logger set up possible via OM-SQ software;

Compatible with Windows XP SP3/Vista/7 and 8 (32-bit and 64-bit)

Front Panel Setup: Via 4 integral keys. All essential functionality available via key pad e.g. channel configuration, start/stop logging etc. Other advanced functions e.g. calculated channels and channel descriptions are available via connection to a PC running OM-SQ data logger software

Stored Setups: 6

Operating Temperature: -20 to 65°C

Dimensions: 135 D x 175 W x 55 mm H

Weight: 0.7 kg

Enclosure: ABS plastic

