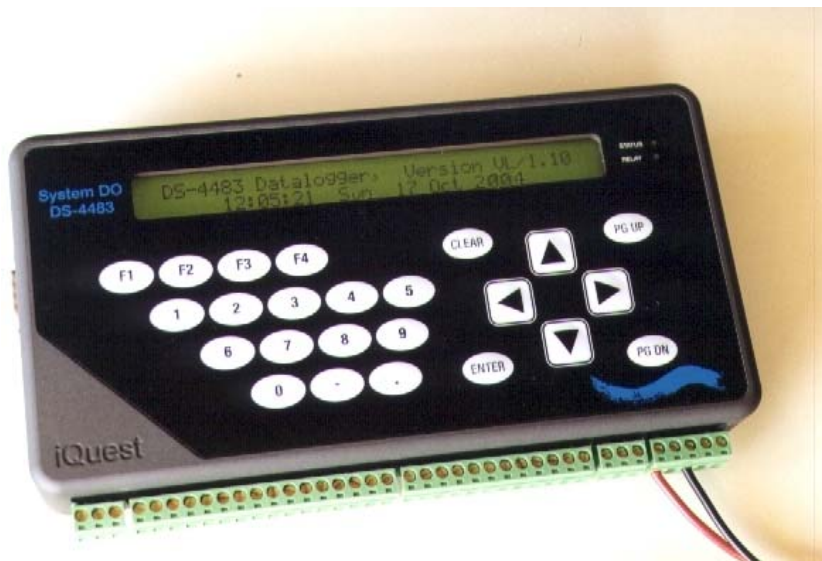




DS-4483 Datalogger

Installation Guide



ISO9001
Certified

Revision History:

Version 1	14 October 2004	First Release
Version 2	11 August 2005	Imperial equivalents added to dimensions

Disclaimer

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All examples and diagrams shown in this manual and any supplied software examples are intended as a guide to understanding this product, not to guarantee operation. iQuest (NZ) Ltd accepts no responsibility for use of this product based on this information or these examples.

Owing to the wide variety of possible applications of this product, you must satisfy yourself as to its suitability to your specific application.

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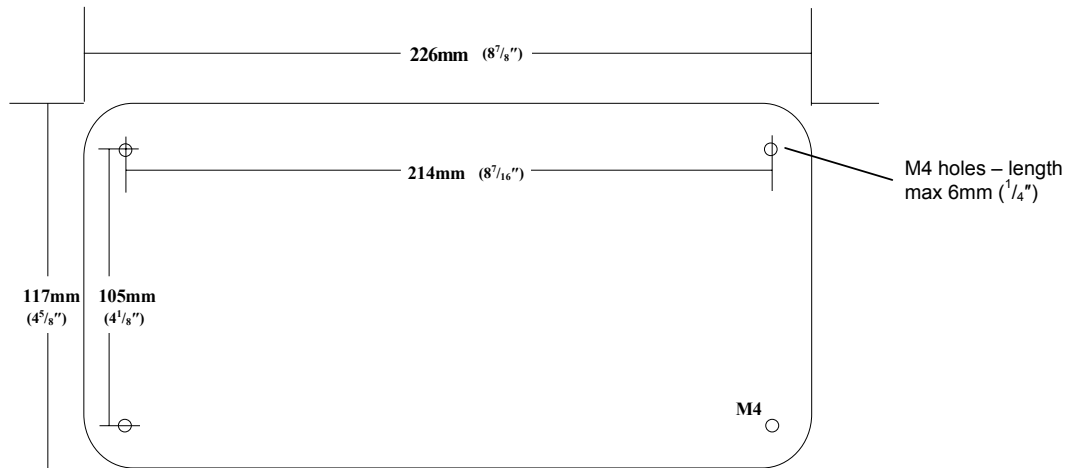
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1 DS-4483 Installation Guide

The DS-4483 Datalogger has been designed to be mounted horizontally. This puts all the I/O and power supply terminations on the bottom of the unit and the RS232 and modem connectors to the left.

The physical dimension of the DS-4483 is (W x H x D):

$$226\text{mm } (8\frac{7}{8}\text{"}) \times 117\text{mm } (4\frac{5}{8}\text{"}) \times 36\text{mm } (1\frac{7}{16}\text{"})$$



The unit is designed for being back mounted on a gear plate. Additional mounting plates are supplied for front mounting or DIN rail mounting.

Note: There are no DIP switches, link settings or analogue sink/divider network headers to be changed within the unit.

The environmental limits of the DS-4483 are as follows:

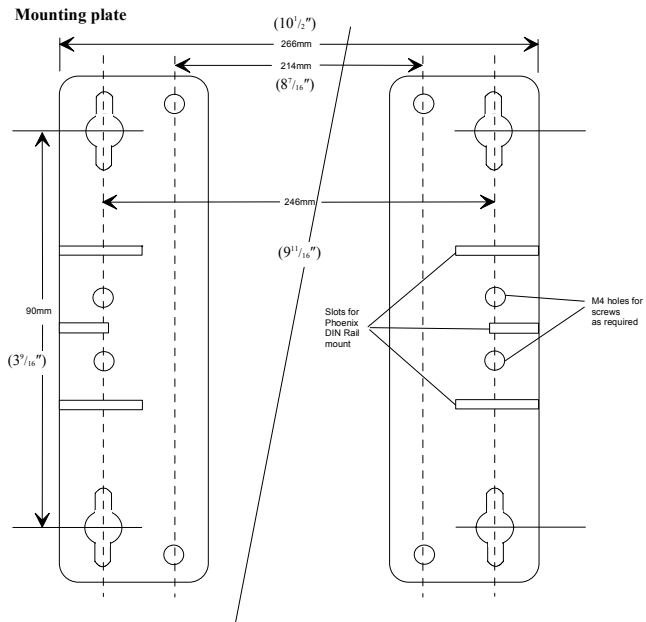
Temperature: 0°C to +70°C (-32°F to +158°F)
Humidity: 20% to 95%RH (non-condensing)

Typical Power Consumption:

All figures specified with 13.8V d.c supply, LOG406x program and VL/2.18 firmware

Continuous Powered Mode –
 76mA with LCD backlight at 0%.
 202mA with LCD backlight at 100%.

Low Power Mode:
 (Depends on actual program/sensor configuration)
 12mA-19mA (display off)



Add the following if applicable:

Internal Digital Output Relay - 27mA when relay is on.

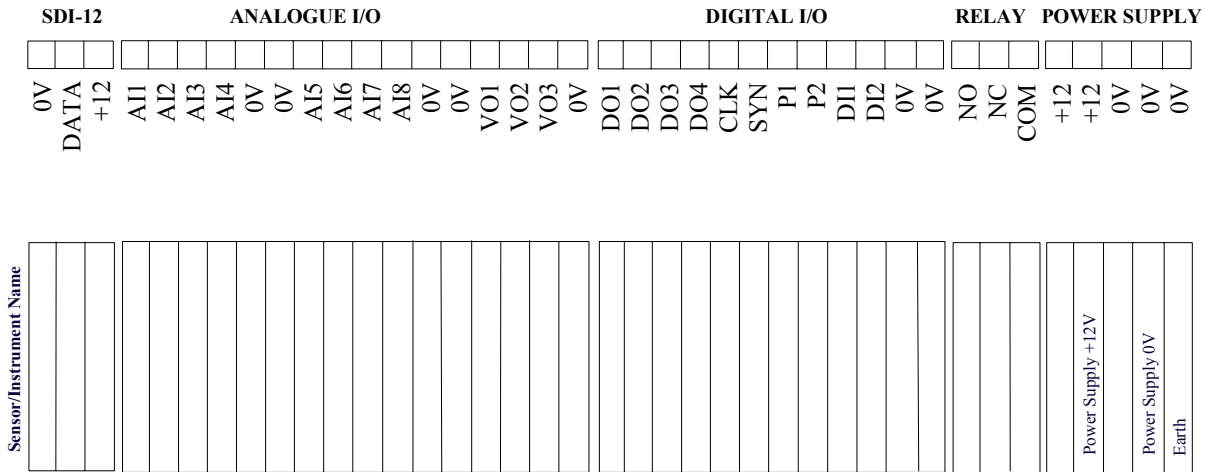
The internal modem communication port connection uses a standard 8 pin RJ45 connector.

A DB9 male (DTE configured) port is provided for the RS232 connection. The wiring configurations for these are given in Appendix B of the User's Guide.

The various Input and Output connections use pluggable right angle connectors and headers.

SDI-12	3 way connector
Analogue I/O	16 way connector
Digital I/O	12 way connector
Auxiliary Relay	3 way connector
Power Supply	5 way connector

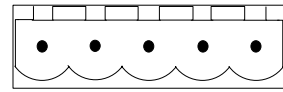
A wiring configuration template is shown below.



Field wiring must not be run in proximity with mains power cables or RF coaxial cables.

Power Supply Options:

A five pin connector is used for the DC power supply. The internal supply employs a switch mode regulator for maximum efficiency.



power

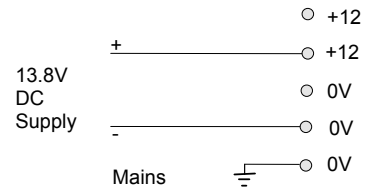
polarity

The power supply is protected against both over voltage or reverse connections. This is achieved by incorporating ultra-fast acting transient protection devices and a self-resetting semiconductor fuse.

Note: All three 0V terminals are commoned together and are bonded to the metal case.

◆ DC Supply without Battery Backup

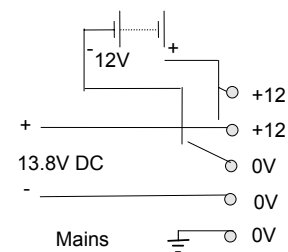
DC Supply - nominally 13.8V
Connect across terminals +12 and 0V



DC Supply with Gel-cell Battery Backup

DC Supply - nominal 13.8V
Connect across terminals +12 and 0V

Gelcell battery (12V max 7Ahr) connected across terminals +12 and 0V as illustrated.



When power is applied to the unit, the status light will flash at a 1Hz rate unless it is in sleep mode.

2 Earthing:

It is strongly recommended that the DS-4483 is connected to a solid mains earth via a short lead to one of the 0V terminals as shown above.

Please note that the power supply 0V, analogue and digital I/O 0V's are internally linked.