Analogue Sensor Display Unit

Model 200



A real time display and logging unit for a variety of commonly used analogue sensors.

FEATURES

- Real time display of sensor output
- Calibrated or voltage display
- Choice of average modes
- Standard deviation of data
- Software gain control (if required)
- Supplies power to sensor
- Internal memory option

COMPATIBILITY

- Seapoint Turbidity Sensor
- Seapoint Chlorophyll, Rhodamine
 & Fluorescein Fluorometers
- D & A OBS3 Turbidity Sensor
- Chelsea Minitracka Fluorimeter & Nephelometer
- WETLabs C-Star Transmissometer
- WETLabs WETStar Fluorometer
- Consult Valeport if your instrument is not on this list

DESCRIPTION

In response to customer demand, Valeport have used many years of experience in the manufacture of display units for their own instruments, to produce a Universal Display Unit for use with a wide range of single channel analogue sensors.

The Model 200 Display Unit supplies power to and takes in a 0 - 5v signal from any of the sensors shown, sampling the signal at 1Hz. Features such as user settable average period and standard deviation of data make the unit ideal for using such sensors in a real time capacity, offering a new operating dimension in cases where the manufacturer does not make a dedicated real time display.

The Model 200 also allows the user to enter their own calibration function and units, and the internal memory option means that data can be preserved for later analysis.



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SPECIFICATION

Sampling

Rate: 1Hz

Average Mode: Fixed Average,

Moving Average or

Free Running

Average Period: 1 to 600 seconds

Gain: Software gain

Software gain control is available

for appropriate

sensors

Processing

The Model 200 will accept an analogue input of 0 - 5v. The unit is fitted with a 15 bit A/D converter, which provides a digital resolution of 1:32000 (0.15mV). Display resolution is limited to 1mV for voltage display, or 1 decimal place for user calibrated display.

Calibration

The Model 200 contains a factory voltage calibration that is not user changeable. However, the user can enter their own secondary calibration and units, and choose

between a voltage or a calibrated display. In cases where the manufacturer issues a secondary calibration of their own, (for example an FTU calibration for a turbidity sensor), this is also available as a display option.

Display

The following parameters are displayed during real time use:

- Average Mode
- Date/Time
- · Average Period
- Gain Factor (where appropriate)
- Real Time Data (and units)
- Average Data (and units)
- Standard Deviation of Data
- Sensor Type

Power

Unit uses 8 x 1.5v C cells, which provide 5.8Ah. The display unit itself draws 24mA (backlight off), but overall lifetime is dependant on sensor power requirements.

Memory

128kbyte RAM memory, offering up to 999 records of the following parameters. Records can be viewed onscreen or downloaded to PC in spreadsheet compatible format.

- Date/Time Stamp
- · Average Mode
- Average Period
- Average Data Value
- Standard Deviation
- · Gain Setting



ORDERING

0200014

Control Display Unit with 128kbyte RAM memory and operating manual.

Please specify type of sensor for which required.

Valeport can also supply complete systems including sensors, display units and cables.



Valeport manufactures a wide range of oceanographic and hydrometric instruments including self-recording and direct reading multi-parameter current meters, sound velocity probes, CTD probes, wave recorders, tide gauges, open channel flow meters, water and plankton samplers, winches, sinker weights, connectors and accessories.

As part of our policy of continuing development, we reserve the right to alter, without notice, all specifications, designs, prices and conditions of supply of all equipment. Data Sheet Reference No. 200/1



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