⇆ **Data**logger

HANWELL
MONITORING & CONTROL

Above:
Detail of USB socket

Below:
Optional wall mounting security bracket

PT100 Temperature

Product Code	*HL4401 & HL4402*
Series	*HL4000*

Typical Applications
Monitoring in:
° Fridge/Freezer monitoring
° Laboratories
° Hospitals
° Pharmaceutical
° Warehousing

Instrument
Dimensions: 110 x 80 x 35 mm
Weight: 200 grams
Power Supply: 3.6 Volt AA Lithium battery
Battery Life: Up to 3 years
Case Materials: ABS & PC
Operating Humidity Range: 0…100% non-condensing
Operating Temperature Range: -20°C to +60°C
Memory Capacity: 100,000 readings

Sensors
Temperature
Sensor: 4 wire PT100
Range: -100°C to +110°C
Accuracy: +/- 0.1°C
Resolution: 0.1°C

Logging Functions
Memory: 2048k EEPROM
Logging Intervals: Programmable from 10 seconds to 24 hours
Record Capacity: 100,000 records
PC Interface: USB communications

Accessories
Code:

W200	USB logger software
Y119	Wall mounting security bracket
Y055	Setup communications cable
G129	Replacement 3.6V Lithium AA battery
CAL-T	3 point calibration between -20 and +110°C (single Ch)
CAL-T-LOW	3 point calibration between -90 and +110°C (single Ch)
CAL-T-2	3 point calibration between -20 and +110°C (dual Ch)
CAL-T-LOW-2	3 point calibration between -90 and +110°C (dual Ch)

The hl4401 & hl4402 are precision 4-wire PT100 temperature dataloggers. The hl4401 is single channel the hl4402 is dual channel. The sensors are connected via 5 pin Lemo plugs and sockets. Each 4000 unit reads its on-board sensors providing accurate and reliable information about environmental conditions.

hl4000 series dataloggers can be used in accordance with GAMP and FDA regulations. The dataloggers and sensors can be calibrated by the either user or Hanwell staff on-site or at Hanwell's in-house calibration laboratory.

The dataloggers are setup and downloaded using a simple software program and a standard USB cable. Data can be downloaded into individual files or downloaded data can be appended to the previous data giving a continuous history. The data is stored at user-defined intervals programmable between 10 seconds and 24 hours. Memory capacity is 100000 readings. The software provides easy to use graphs, trends and statistics. Data can be exported to common office programs.

Each unit has an LCD screen simultaneously displaying the most recent readings taken and the predicted battery life. Alarm information is also displayed.

The datalogger is powered by a single 3.6V AA Lithium battery, which can be fitted by the user and battery life will be dependent on the logging rate set, typical life will be 3 years or better. An indicator on the LCD will warn when the battery is low, and the logger maintains a record of when the battery was last changed.

The moulded case allows easy access to the battery and USB socket, as well as having slots to fit onto secure wall brackets.

CFR21 part 11 compliant software is available. OQ & IQ templates are included, full on-site validation services are available.

The 4000 range has been designed to comply with the RoHS and WEEE EU directives, and carries the CE mark.

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