1430 Smart indicator series

Temperature Micro Logger

- Intelligent temperature logger for refrigeration
- Wireless data communication
- Over 14,000 data readings stored
- Non-volatile memory
- Industry standard Thermistor supplied
- Configurable data log interval
- Monitors mains power interruptions
- Programmable upper/lower limit alarm
- Blue LED indicates normal operation
- Red LED indicates problem
- Snap-in mounting

100 to 230Vac ±20% 50/60Hz.
Less than 1 watt (power consumption)

UL Pending

CE **FCC compliane, CE Mark**

RoHS **RoHS compliant**

C 1435 A L - - -

TERMINAL FUNCTION SOFTLINE LENS BODY COLOUR

TERMINAL

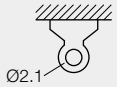
C

6.3 x 0.8

H

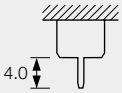
4.8 x 0.8

T



Solder

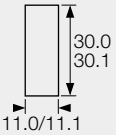
X



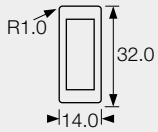
PCB 0.8Sq

BODY & DIMENSIONS

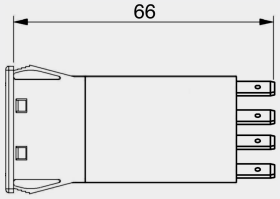
L Panel Cut-Out



Bezel



Dimensions



SPECIFICATION

Dimensions	Bezel 32.0mm x 14.0mm Panel cut-out 11.0/11.1mm x 30.0/30.1mm
Panel thickness	0.75mm to 2.5mm
Body	Nylon 6.6, matt finish, black colour is standard
Lens	Clear Polycarbonate, Softline matt finish
Terminals	Copper alloy, Silver plated
Flame retardancy	UL94V2
RoHS compliant	Yes
Operating supply	100 to 230Vac ±20% 50/60Hz.
Power consumption	Less than 1 Watt
Operating conditions (body)	–20°C to +70°C (–4°F to 158°F) 0 to 95% RH (non-condensing)
Measurement range	–30ºC to +80ºC (–22ºF to +176ºF)
Measurement accuracy	±1.0ºC (±1.8F)
Measurement resolution	±0.5ºC (±0.9ºF)
Temperature sensor	NTC Thermistor, sealed sensor, cable length 1m
Communications method	Infrared serial data port
Logging Interval	Programmable 1 second to 12 hours per reading
Logging data capacity	>14,000 measurements stored
Data retention	>10 years without power
Electromagnetic Compatibility	Compliant with directives 89/336/EEC & 92/31/EEC
EMC Immunity	EN 55014-2:1997 Household appliances EN 61000-6-2:2005 Industrial Environments,10 V/m EN 61000-4-2:1995 Electrostatic Discharges (ESD) EN 61000-4-3:2002 RF Electromagnetic fields EN 61000-4-4:2004 Fast Transients & Bursts EN 61000-4-5:1995 Surges EN 61000-4-6:1996 Conducted disturbances EN 61000-4-11:2004 Voltage dips & interruptions
EMC Emissions	EN 55014-1:2001 Household appliances EN 55022 Class B:1998 Domestic environments
Approvals	UL Pending FCC compliant, CE Mark

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APPLICATIONS

- Refrigeration temperature monitoring for food safety compliance
- Deep freeze monitoring
- Cold storage monitor
- Chiller monitoring
- Process control temperature monitoring
- Visual checking of correct temperature
- Control system verification – independent monitoring of controller
- Power quality indication – records power interruptions
- Equipment status check - simple indicator lights

INDICATIONS

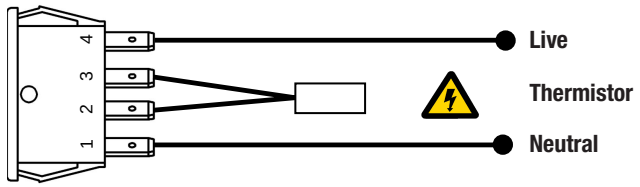
An Intelligent temperature data logging device for refrigeration applications, ideal for monitoring that freezers and chillers are maintaining the required temperatures to comply with food safety guidelines.

Designed to directly replace the standard neon indicator already fitted on many appliances, the front-panel mounted temperature logger operates like a standard neon indicator, giving visible status indication for the appliance or application. Normal operation will show continuous blue LED illumination (contact factory for other colours) while the monitored temperature is within the 'safe' range between lower and upper limits. The upper and lower temperature limits for alarm indication are fully user programmable.

The embedded microcontroller stores the temperature readings at regular intervals for retrieval and analysis. Over 14,000 readings can be stored in non-volatile memory (no battery is required). The data log interval is user configurable between 1 second and 12 hours. The logger also records the number of mains power interruptions. Stored data can be transferred to a collection device (PDA or Laptop) via a wireless infrared data link – a PC Software package is available.

The device is provided with an industry standard Thermistor temperature sensor.

CONNECTIONS



PART NUMBER

1435AL

Specify Terminal Type:	C, H, T, X
Specify Model Code:	1435AL
Specify LED Colour:	Red/Green, Red/Blue

SOFTWARE

The PC software allows fast and simple configuration of the temperature micro logger device settings. The stored temperature data can be easily extracted using a serial port infrared data link.

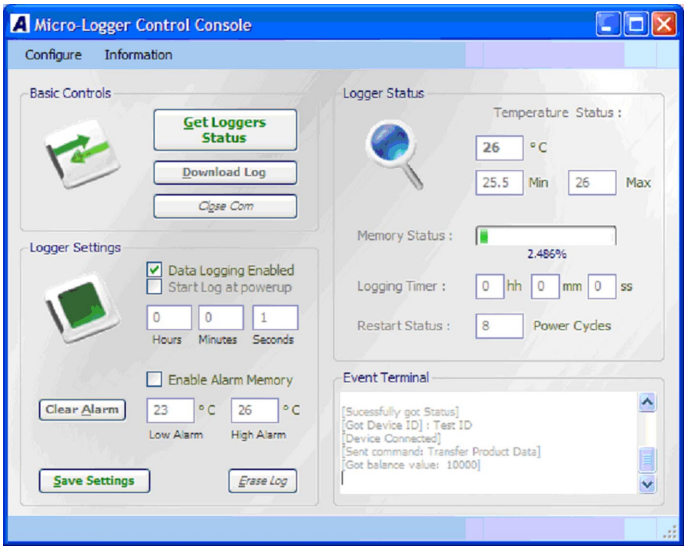
With a single button press, the 'Download log' feature imports the stored temperature reading data directly into an Excel spreadsheet for easy analysis and display.

The logging time interval can be set to suit the end application.

Low and high alarm setpoints can be fully configured for LED indication on the logger front panel. When the measured temperature is between the low and high limits, the Blue LED illuminates to indicate that the measured temperature is acceptable. When the measured temperature falls outside of low or high alarm setpoint, the LED illumination changes colour to Red. Additionally, if the alarm memory box is checked, the only way to clear a temperature alarm is to press the 'Alarm Clear' button.

The Logger status is continually updated while the infrared data link is active, and the current measured temperature is displayed in °C or °F.

Memory usage can also be monitored.



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