

Temperature Micro Logger 1430 Smart indicator series



- ▶ 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
- ▶ Panel cut out:



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

UL Recognised. File no. E311309



CE Mark



FCC compliant



RoHS compliant

C 1435 A L - - -

TERMINAL FUNCTION SOFTLINE LENS BODY COLOUR

▶ TERMINAL	▶ BODY & DIMENSIONS	▶ SPECIFICATION
<p>C</p> <p>6.3 x 0.8</p> <p>H</p> <p>4.8 x 0.8</p> <p>T</p> <p>0.21 Solder</p> <p>X</p> <p>4.0 PCB 0.8Sq</p> <p>All dimensions in millimetres (mm)</p>	<p>L Panel Cut-Out</p> <p>30.0 30.1 11.0/11.1</p> <p>Bezel</p> <p>R1.0 14.0 32.0</p> <p>Dimensions</p> <p>66</p>	<p>Dimensions</p> <p>Bezel 32.0mm x 14.0mm Panel cut-out 11.0/11.1mm x 30.0/30.1mm 0.75mm to 2.5mm</p> <p>Panel thickness</p> <p>Body Lens Terminals Flame retardancy RoHS compliant</p> <p>Nylon 6.6, matt finish, black colour is standard Clear Polycarbonate, Softline matt finish Copper alloy, Silver plated UL94V-0 Yes</p> <p>Operating supply Power consumption</p> <p>100 to 230Vac $\pm 20\%$ 50/60Hz. Less than 1 Watt</p> <p>Operating conditions (body)</p> <p>-20°C to +70°C (-4°F to 158°F) 0 to 95% RH (non-condensing)</p> <p>Measurement range Measurement accuracy Measurement resolution Temperature sensor</p> <p>-30°C to +80°C (-22°F to +176°F) $\pm 1.0^\circ\text{C}$ ($\pm 1.8^\circ\text{F}$) $\pm 0.5^\circ\text{C}$ ($\pm 0.9^\circ\text{F}$) NTC Thermistor, sealed sensor, cable length 1m</p> <p>Communications method Logging Interval Logging data capacity Data retention</p> <p>Infrared serial data port Programmable 1 second to 12 hours per reading >14,000 measurements stored >10 years without power</p> <p>Electromagnetic Compatibility EMC Immunity</p> <p>Compliant with directives 89/336/EEC & 92/31/EEC</p> <p>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</p> <p>EMC Emissions</p> <p>EN 55014-1:2001 Household appliances EN 55022 Class B:1998 Domestic environments</p> <p>Approvals</p> <p>UL Recognised FCC compliant CE Mark</p> <p>Standards</p> <p>UL 508 CSA C22.2 No. 14-05</p>

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.

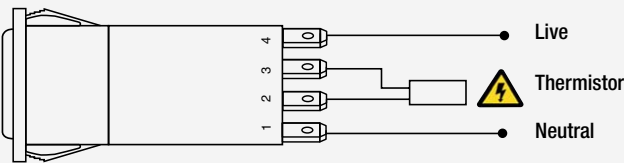
Designed to directly replace the standard neon indicator already fitted on many appliances, the front-panel mounted temperature logger operates like a standard neon indicator, giving visible status indication for the appliance or application. Normal operation will show continuous blue LED illumination (contact sales 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 serial to infrared communication adapter is available as an accessory.

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

PC and PDA software can be downloaded from www.arcoelectric.co.uk/software

CONNECTIONS



PART NUMBERS

1435AL

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

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.

