L300 8-ZONE TEMPERATURE ALARM / ON-OFF CONTROLLER WITH 10A SWITCHING FOR LABORATORY / TRAINING APPLICATIONS

The Labfacility L300 Pt100 temperature alarm / on-off controller can be used in conjunction with a PC to provide accurate monitoring and alarm or on-off control of up to 8- zones simultaneously. It can also be used as a stand-alone instrument without the need for a PC.
The PC software supplied with the instrument allows control, configuration, measurement, logging, charting, alarm & relay configuration and calibration functions via a PC.
Self-calibration of Pt100 ranges is simple and uses plug-in precision resistors.

- Low cost – high performance
- USB PC interface
- 8 Pt100 (3 wire) inputs
- Built-in display for selected channel or all channels auto-scrolling
- Resolution 0.1°C on display, 0.01°C in software
- Self-calibration feature
- Select °C / °F
- PC software included for remote control and measure, logging, configuration and calibration
- 8 x configurable change-over relays 10A/250V
- Simple operation
- CE marked
- RoHS compliant

Applications

Food preparation • Storage facilities • Technical educational establishments • Environmental • R&D • Heating & ventilation setup • Building & energy management • Instrumentation laboratories • Experimentation • Refrigeration/freezer plant monitoring • Museums and Galleries

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Specifications

Specification at an ambient temperature of 20°C Measurement
Input / Ranges
Pt100 to IEC751, *3 wire -200°C to 850°C*

Note: all inputs are non-isolated and sensors must be of insulated construction.

Accuracy

Linearisation	*±0.05°C*
Pt100 range	*better than ±0.05°C ±0.1% of range*
Zero drift	*±0.01 % of span per °C*
Span drift	*±0.01 % of span per °C*
Display	*LCD, backlight*
Display resolution	*Thermocouple ranges 0.1°C* *Pt100 range 0.01°C*
Indication	*Channel No., measured temperature* *(°C or °F)*
Reference junction compensation for thermocouples	*Automatic, accurate reference junction compensation is incorporated for thermocouple ranges*
Self-calibration	*User facility incorporated. The instrument auto-calibrates on every A/D cycle **
Sensor open circuit detection & indication	*Upscale indication*
Ambient operating Temperature	*0 to 50°C*

Alarm/Control

Alarm modes	*High / Low / Band/ control*
Relay contacts	*x3 normally open */common/ normally closed* ** The contact position when the relay is de-energised Rated 1 0A/250V, resistive load. Relays (1to 8) can be assigned to any input and polarity (normal or Inverse) selected*
User interface	*Front panel keys for selecting channel number for display or auto-scan selection; front panel keys for relay configuration and alarm parameters. 8 x LED indicators for relay actuation.*
Storage temperature	*-20°C to 70°C*
Display	*LCD with backlight*
Input Terminations	*8 x Pt100, terminal blocks*

Relay Terminations	*4 x 6-way connector*
PC Interface	*USB*
Power supply	*6Vdc (5.5-9.0V) via universal mains adaptor (supplied) 1 20-250V 50/60Hz*
Logging interval	*5 seconds to 1 hour*
On-board memory	*512 sets of readings*
PC software	*Supplied as standard on CD-ROM* *Remote control & measure: -* *Log readings to file* *Download to PC* *Logging, charting, alarm configuration and calibration*
Standard accessories	*The L300 is supplied with a power supply adaptor, USB lead, PC software, and instruction manual (on CD).*

** The integral, self-calibration facility for the thermocouple version is a rapid and convenient method for on-site calibration and does not require any additional equipment other than the special, external link (optional).*
Self-calibration of Pt100 ranges is quickly and conveniently performed using plug-in precision resistors (optional).
Traceable calibration can be achieved by the user conveniently and without recourse to an accredited Laboratory if there is access to a certified DVM; this can be used to measure the L200 internally generated calibrated Voltage via the "cal port" presented externally to the instrument case. Considerable time and cost saving are achieved by this method.

Ordering Information

Type	**Input Terminations**	**Order Code**
L300-PT	8 x Pt100, terminal blocks	**XF-1012-FAR**