



LEOPARD FAMILY

BL-40H

**Leopard Temperature Meter
4 Digit 0.56" LEDs
in a 1/16 DIN CASE**

CE

**An economically smart temperature meter relay
for J, K, R, and T type thermocouple and RTD inputs.**

General Features

- Thermocouple (J, K, R and T types) or RTD (Pt-100, 385 and 392 curves, 3 wire/4wire). Digitally Linearized.
- Optional isolated 16 bit analog output. User or factory scalable to 4 to 20 mA, 0 to 20 mA or 0 to 10 V across any desired digital span from $\pm$ one count to the full scale range of -1999 to 9999 (12000 counts).
- Auto-sensing AC/DC power supply. For voltages between **85-265 V AC / 95-370 V DC (PS1)** or 15-48 V AC / 10-72 V DC (PS2).
- Standard red or optional green or super bright red 4-digit LED
- Three annunciator LEDs provide front panel alarm status indication for up to three setpoints.
- One 10 Amp Form C and one 5 Amp Form A relay, or up to three 5 Amp Form A relays are available.
- When analog output is installed, one 10 Amp Form C or two 5 Amp Form A relays can be supported.

Software Features

- Three-button programming from the front panel (UP, DOWN and PROGRAM buttons).
- Three front panel selectable ranges.
- Front panel selectable four-level brightness control of digital display, and setpoint LEDs.
- Three programmable setpoints.
- Relay activation can be selected to occur above (HI) or below (LO) each setpoint.
- Hysteresis setting for all three setpoints. Delay on make and delay on break for SP1 and SP2.

Input Module Compatibility

There are 2 different Plug-in Modular Input Signal Conditioners for this specialized temperature only member of the Leopard Family. IT10 is for J, K, T and R thermocouples. IT11 is for 3 wire/4 wire Pt-100 RTD inputs.



LEOPARD

Specifications

Input Specs:Depends on input signal conditioner
A/D Converter:.....14 bit single slope
Accuracy:..... $\pm(0.05\%$ of reading + 2 counts)
Temp. Coeff.:.....100 ppm/ $^{\circ}$ C (Typical)
Warm up time:.....2 minutes
Conversion Rate:5 conversions per second (Typical)
Display:.....**4 digit 0.56" Red LED display (std)**,
 0.56" Red, Green or Super Bright Red (optn). Range -1999 to 9999 counts.
Polarity:.....Assumed positive. Displays - negative
Decimal Selection:.....Automatic by resolution select XXX•X
Positive Overrange:..Top segments of digital display flash
Negative Overrange:..Bottom segments of digital display flash
Relay Output:Three 5 Amp Form A relays or one 10 Amp Form C, and one 5 Amp Form A relay.
Analog Output:.....Isolated 16 bit user scalable mA or V
 OIC (mA out).....4-20 mA @ 0 to 500 Ω max loop resistance
 OIV (volts out).....0-10 V DC @ 500 Ω or higher resistance
Power Supply:.....AC/DC Auto sensing wide range supply
PS1 (std)**85-265 VAC / 95-370 VDC @ 2.5W max 3.2W**
PS215-48 VAC / 10-72 VDC @ 2.5W max 3.2W
Operating Temp:.....0 to 60 $^{\circ}$ C
Storage Temp:-20 $^{\circ}$ C to 70 $^{\circ}$ C.
Relative Humidity:95% (non condensing)
Case Dimensions:.....1/16 DIN, Bezel: 96x24mm (3.78"x0.95")
 Depth behind bezel 122.2 mm (4.83")
 Plus 12.7mm (0.5") for Right-angled connector.
Weight:.....7 oz., 9 oz when packed

Ordering Information

BASIC MODEL #	DISPLAY	POWER SUPPLY	INPUT MODULES	ANALOG OUTPUT	RELAY OUTPUT	OPTIONS / ACCESSORIES
BL-40H						OA_____

Add to the basic model number the order code suffix for each standard option required. The last suffix is to indicate how many different special options and or accessories that you may require to be included with this product.

Ordering Example: BL-40H-DR-PS1-IT10-OIC-R1-OA2, the 2 OA's are, CR-CHANGE and a 75-DBBZ96X24

► BASIC MODEL NUMBER

BL-40H . . 96x24mm, Leopard, 4 Digit, Temperature

Standard Options for this Model Number

Order Code Suffix	Description
-------------------	-------------

► DISPLAY

DR . . Red LED, 0.56 inch high

DB . . . Super-bright Red LED, 0.56 inch high

DG . . . Green LED, 0.56 inch high

► POWER SUPPLY

PS1 . 85 - 265VAC / 95 - 370VDC

PS2 . . . 15 - 48VAC / 10 - 72VDC

► INPUT MODULES (Partial List. See www.texmate.com)

Unless otherwise specified Texmate will ship all modules precalibrated with factory preselected ranges and/or scalings as shown in **BOLD** type.

IT10 . . . Thermocouple, J/K/R/T, Selectable °C/°F, **1°/0.1°**

IT11 . . . RTD, 100Ω Pt. Selectable **3/4-wire**, °C/°F, **1°/0.1°**, 385/392

► ANALOG OUTPUT*

OIC . . . Isolated analog 4-20mA (with a Max. Two-5A Form A Relays)

OIV . . . Isolated analog 0-10VDC (with a Max. Two-5A Form A Relays)

*Note: When either of the Analog Output options is installed, only the R1, R2 and R11 Relay Output options can be co-installed (see below).

► RELAY OUTPUT

R1 . . . Single 5A Form A Relay

R2 . . . Dual 5A Form A Relays

R3 . . . Three 5A Form A Relays; SP1 & SP2 common**

R11 . . . Single 10A Form C Relay

R16 . . . Single 10A Form C & Single 5A Form A Relays**

**R3 & R16 cannot be co-installed with Analog Output options.

Special Options and Accessories (OA's)

Part Number	Description
-------------	-------------

► SPECIAL OPTIONS (Specify Inputs or Outputs & Req. Reading)

CR-CHANGE . . . Calibrated Range Change to another Standard Range

CS-L/40 Custom Scaling within any Std. or Custom Selectable Range

CSR-L/40 Custom Selectable Range Installation or Modification

CSS-L/40 Custom Special Scaling beyond the Standard Range

COA-L/SINGLE . . Custom Output - Special Scaling of Analog Output

COR-L/RELAY . . . Custom Output - Relays Installed in Non-Standard Locations

CCP-L/SETUP . . . NRC to Set-up Custom Configuration - Functions, Codes

CCP-L/INSTL . . . Factory Installation - Custom Configuration

► ACCESSORIES

75-DBBZ96X24 . . . Black Bezel for 96x24mm Case

75-DMTC96X24 . . . Side Slide Brackets (2 pc) - extra set, extra strength

ART-FS-S/D/C . . . NRC for artwork & set-up Faceplate/Desc/Co. Logo

ART-FS-S/D NRC for artwork & set-up Faceplate/Desc

ART-FS-001 Install Custom Faceplate per meter - 1 color

93-PLUG2P-DP . . . Extra Screw Terminal Conn., 2 Pin Power Plug

93-PLUG2P-DR . . . Extra Screw Terminal Conn., 2 Pin Plug

93-PLUG3P-DR . . . Extra Screw Terminal Conn., 3 Pin Plug

93-PLUG4P-DR . . . Extra Screw Terminal Conn., 4 Pin Plug

DN.CAS96X24L . . . Complete 96x24mm Case with bezel

OP-MCLP96X24 . . . Screw Mounting Clips (2 pc) - to screw tighten slide brackets

OP-MTLCLIP Screw Mounting Clips (2 pc) to screw tighten slide brackets

75-DTP96X24 Black Metal Trim Plate (96x24mm Case) 1 Meter

75-DTP2X9624 Black Metal Trim Plate (96x24mm Case) 2 Meters

75-DTP3X9624 Black Metal Trim Plate (96x24mm Case) 3 Meters

Many other options and accessories are available. See full price list for more details.

Prices subject to change without notice.

WARRANTY

Texmate warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from date of shipment. Texmate's obligations under this warranty are limited to replacement or repair, at its option, at its factory, of any of the products which shall, within the applicable period after shipment, be returned to Texmate's facility, transportation charges pre-paid, and which are, after examination, disclosed to the satisfaction of Texmate to be thus defective. The warranty shall not apply to any equipment which shall have been repaired or altered, except by Texmate, or which shall have been subjected to misuse, negligence, or accident. In no case shall Texmate's liability exceed the original purchase price. The aforementioned provisions do not extend the original warranty period of any product which has been either repaired or replaced by Texmate.

USER'S RESPONSIBILITY

We are pleased to offer suggestions on the use of our various products either by way of printed matter or through direct contact with our sales/application engineering staff. However, since we have no control over the use of our products once they are shipped, NO WARRANTY WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE is made beyond the repair, replacement, or refund of purchase price at the sole discretion of Texmate. Users shall determine the suitability of the product for the intended application before using, and the users assume all risk and liability whatsoever in connection therewith, regardless of any of our suggestions or statements as to application or construction. In no event shall Texmate's liability, in law or otherwise, be in excess of the purchase price of the product.

Texmate cannot assume responsibility for any circuitry described. No circuit patent or software licenses are implied. Texmate reserves the right to change circuitry, operating software, specifications, and prices without notice at any time.



461 Boston Street, Unit E6, Topsfield, MA 01983
Toll Free (800) 644-9773 · Phone (978) 887-2020
meters@spectrumind.com