

## Leopard Bargraph Temperature Meter 101 Segment, 4 Digit 0.32" LEDs in a 9/64 DIN CASE



## LEOPARD FAMILY

## 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 $20 \mathrm{~mA}, 0$ 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).
- A Programmable Tricolor (Red-Green-Orange) or mono color (red or green), 101 segment high brightness bargraph. Vertical or optional horizontal format.
- Red 4-digit LED display with a range of -1999 to 9999 (12000 counts). Optional green digital display.
- Front panel LED annunciators provide indication of setpoint status.
- Two 10 Amp Form C, and two 5 Amp Form A relays available
- Auto-sensing AC/DC power supply. For voltages between 85-265 V AC / 95-370 V DC (PS1) or 18-48 V AC / 10-72 V DC (PS2).
- 24 V DC excitation is available to power external $4 / 20 \mathrm{~mA}$ transmitters and 5 or 10 V DC excitation is available for resistance bridge type sensors.
- Provision to connect an external programming lockout switch.
- Provision for external DIM switch to reduce the brightest display setting by $50 \%$.
- Optional NEMA-4 front cover.
- Automatic intelligent averaging, smooths noisy signals while providing a fast display response to real level changes.


## Software Features

- The bargraph can display, full scale, any desired portion of the digital reading.
- Bargraph center zero function.
- Four programmable setpoints.
- Setpoint 1 has delay-onmake and delay-on-break plus a special "pump on pump off" mode that creates a Hysteresis Band between

SP1 and SP2.

- Relay activation can be selected to occur above (hi) or below (Lo) each setpoint.
- Digital display blanking.
- Decimal point setting.
- Four-level brightness control of the bargraph and digital display.


## Input Module Compatibility

There are 3 different Plug-in Modular Input Signal קian 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 Pt100 RTD inputs. IT15 is for 3 wire/4 wire Pt-1000

LEOPARD RTD inputs.

## 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/ ${ }^{\circ} \mathrm{C}$ (Typical)
Warm up time: $\qquad$ .2 minutes
Conversion Rate: ...... 10 conversions per second (Typical)
Digital Display:.......... 4 digit 0.31" LED red (std), green (optn) Range -1999 to 9999 counts.
Bargraph Display:..... 101 segment 4" red vertical (std), green or tricolor (optn), horizontal (optn)
Polarity:......................Assumed positive. Displays - negative
Decimal Selection:....Front panel button selectable, $X \bullet X \bullet X \bullet X \bullet$
Positive Overrange:..Bargraph and top segments of digital display flash.
Negative Overrange:.First segment of bargraph and bottom segments of digital display flash.
Relay Output: ............Two 5 Amp Form A relays and Two 10 Amp Form C relays.
Analog Output:..........Isolated 16 bit user scalable mA or V
OIC (mA out)...........4-20 mA @ 0 to $500 \Omega$ max loop resistance
OIV (volts out).......... 0-10 V DC @ $500 \Omega$ or higher resistance
Power Supply:...........AC/DC Auto sensing wide range supply
PS1 (std) ................85-265 VAC / 95-370 VDC @ 2.5W max 4.2W
PS2 .........................18-48 VAC / 10-72 VDC @ 2.5W max 4.2W
Operating Temp.:....... 0 to $60^{\circ} \mathrm{C}$
Storage Temp: ........... $-20^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$
Relative Humidity: ....95\% (non condensing)
Case Dimensions:.....9/64 DIN (Bezel 36Wx144Hmm)
Depth behind bezel (5.83") 148mm
Plus ( $0.7^{\prime \prime}$ ) 18 mm for connectors
Weight:......................9.5 oz., 12 oz when packed


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: FL-B101D40H-VRR-PS1-IA01-OIC-R11-OA2 plus CR-CHANGE and an OP-N4/144X36

## HBASIC MODEL NUMBER

FL-B101D40H . . 144x36mm, 101 Segment Bargraph, 4 Digit, Temperature

Standard Options for this Model Number
Order Code Suffix Description

## h DISPLAY

VRR . . Red LED Bargraph w/4 Digit Red DPM, Vertical
VGG . . . . Green LED Bargraph w/4 Digit Green DPM, Vertical
VGR . . . . Green LED Bargraph w/4 Digit Red DPM, Vertical
VRG . . . . Red LED Bargraph w/4 Digit Green DPM, Vertical
VTG . . . . Tri-Color Bargraph w/4 Digit Green DPM, Vertical
VTR . . . . Tri-Color Bargraph w/4 Digit Red DPM, Vertical
HRR . . . . Red LED Bargraph w/4 Digit Red DPM, Horizontal
HGG. . . . Green LED Bargraph w/4 Digit Green DPM, Horizontal
HGR . . . . Green LED Bargraph w/4 Digit Red DPM, Horizontal
HRG . . . . Red LED Bargraph w/4 Digit Green DPM, Horizontal
HTG . . . . Tri-Color Bargraph w/4 Digit Green DPM, Horizontal
HTR . . . . Tri-Color Bargraph w/4 Digit Red DPM, Horizontal
DSGG. . . Dual Scale Green LED Vertical Bargraph w/4 Digit Green DPM
DSGR . . . Dual Scale Green LED Vertical Bargraph w/4 Digit Red DPM
DSRG . . .Dual Scale Red LED Vertical Bargraph w/4 Digit Green DPM
DSRR . . .Dual Scale Red LED Vertical Bargraph w/4 Digit Red DPM
DSTG . . .Dual Scale Tri-Color Vertical Bargraph w/4 Digit Green DPM
DSTR . . .Dual Scale Tri-Color Vertical Bargraph w/4 Digit Red DPM

## LPOWER SUPPLY

PS1 . . 85-265VAC/95-370VDC
PS2 . . . .15-48VAC/10-72VDC

## h 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 ${ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}, 1^{\circ} / 0.1^{\circ}$
IT11... RTD, $100 \Omega$ Pt. Selectable $3 / 4$-wire, ${ }^{\circ} \mathrm{C} /{ }^{\circ}$ F, $\mathbf{1}^{\circ} / 0.1^{\circ}$, $385 / 392$
IT15 . . . RTD, $1000 \Omega$ Pt. Selectable $\mathbf{3} / 4$-wire, ${ }^{\circ} \mathrm{C} /{ }^{\circ} \mathbf{F}, \mathbf{1}^{\circ} / 0.1^{\circ}$, $385 / 392$

## hRELAY OUTPUT

R11... Single 10A Form C Relay
R12 ... Dual 10A Form C Relays
R13 ... Dual 10A Form C \& One 5A Form A Relays
R14 ... Dual 10A Form C \& Dual 5A Form A Relays
R15 ... Single 10A Form C \& Dual 5A Form A Relays
R16 . . . Single 10A Form C \& Single 5A Form A Relays

## Special Options and Accessories

Part Number Description
h SPECIAL OPTIONS (Specify Inputs or Outputs \& Req. Reading) CR-CHANGE . . . . . . Calibrated Range Change to another Standard Range CS-L/BAR. . . . . . . . Custom Scaling within any Stnd. or Custom Selectable Range CSR-L/BAR. . . . . . . Custom Selectable Range Installation or Modification CSS-L/BAR. . . . . . . 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 (Specify Serial \# for Custom Artwork Installation)

75-DMC14436B .... Side Slide Brackets-Wide opening (2 pc)
75-DMC144X36 . . . . Side Slide Brackets-stand. (2 pc) - extra set
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
93-PLUG5P-DR. . . . . Extra Screw Terminal Conn., 5 Pin Plug
OP-MTL144×36. . . . . Metal Surround Case, includes screw mounting clips
OP-MTLCLIP . . . . . Screw Mounting Clips (2 pc) - to screw tighten slide brackets
OP-N4/144X36 . . . . 144×36mm clear lockable front cover-NEMA 4X, splash proof
OP-PA/144X36 . . . . . Panel Adapter for $144 \times 36 \mathrm{~mm}$ from 6 inch cutout
For Custom Face Plates and Scales see page 15.

Many other options and accessories are available. See full price list for more details. Prices subject to change without notice.

## I ANALOG OUTPUT

OIC ... Isolated 16 Bit Current Output, $4-20 \mathrm{~mA}$
OIV ... Isolated 16 Bit Voltage Output, 0-10VDC

## 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 thase 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 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.
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