



CE



LEOPARD FAMILY

## BL-B51D40

Leopard Bargraph Meter  
51 LED Segments  
in a 1/16 DIN Case

A red, 51 segment bargraph with a 4-digit LED digital display for monitoring, measurement and control applications mounted in a 24x96mm case.

### General Features

- External transmitters or signal conditioners can be eliminated by direct connection of the sensor output to more than 38 Plug-in Input Signal Conditioners that include:
  - AC/DC Current
  - AC/DC Voltage
  - Load Cell
  - Pressure
  - Process
  - Prototype
  - Resistance
  - Temperature
  - 4 to 20 mA
- 24 V DC excitation is available to power external transmitters and 5 or 10 V DC excitation is available for resistance bridge type sensors such as Load Cells and Pressure Transducers.
- A red, 51 segment high brightness bargraph.
- Red 4-digit LED display with a range of 1999 to 9999 (12000 counts).
- Front panel LED annunciators provide indication of setpoint status.
- Two 10 Amp Form C and two 5 Amp Form A relays available for the BL-B51D40.
- Auto-sensing AC/DC power supply. For voltages between **85-265 V AC/95-370 V DC (PS1)**.
- Provision for external DIM switch to reduce the brightest display setting by 50%.
- 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-on-make 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

**LEOPARD FAMILY:** More than 40 different Plug-in **I-Series** Input Signal Conditioners are approved for Texmate's Leopard Family of meters. Some examples are shown on pages 12 - 13. See [www.texmate.com](http://www.texmate.com) for an up to date listing.

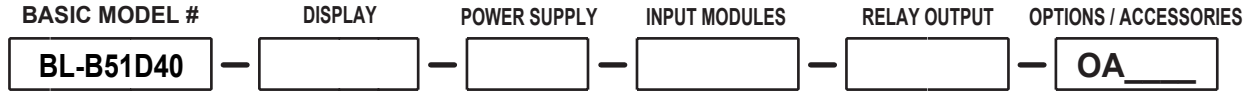


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### Specifications

**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:** ..... 3 to 16 conversions per second  
**Display:** ..... 4 digit 0.31" Red LED display (std).  
**Polarity:** ..... Assumed positive. Displays -ve sign.  
**Decimals:** ..... User programmable  
**Positive Overrange:** ..... Bargraph and top segments of digital display flash.  
**Negative Overrange:** ..... First segment of bargraph and bottom segments of digital display flash.  
**Display Range:** ..... -1999 to 9999 counts - 101 segment digital display  
0 to 101 segments on bargraph  
**Relay Output:** ..... Two 5A Form A relays.  
**Power Supply:** ..... AC/DC Auto sensing wide range supply  
85-265V AC / 95-370V DC@3W  
**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" x 0.95"),  
Depth behind bezel 122.2 mm (4.83")  
Plus 12.7mm (0.5") for Right-angled conn.  
**Weight:** ..... 6.5 oz., 8.5 oz when packed.

# Ordering Information



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-B51D40-HRR-PS1-IA01-OIC-R1-OA2, the 2 OA's are, HD-CHANGE and a GN.CAS96X24L

### ► BASIC MODEL NUMBER

BL-B51D40 . . .96x24mm, Leopard, 51 Segment Bargraph, 4 Digit

### Standard Options for this Model Number

#### Order Code Suffix

#### Description

#### ► DISPLAY

VRR . . .Red LED Bargraph w/4 Digit Red DPM, Vertical

#### ► POWER SUPPLY

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

#### ► INPUT MODULES (Partial List. See [www.texmate.com](http://www.texmate.com))

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

IA01 . . .AC-Volts Scaled RMS, 200/**600V** AC  
IA02 . . .AC-Volts Scaled RMS, 200mV/**2V/20V** AC  
IA03 . . .AC-mA Scaled RMS, **2/20/200**mA AC  
IA04 . . .AC-Amps Scaled RMS, **0-1 Amp AC (0-100.00)**  
IA05 . . .AC-Amps Scaled RMS, **0-5 Amp AC (0-100.00)**  
IA06 . . .AC-Volts True RMS, 200/**600V** AC  
IA07 . . .AC-Volts True RMS, 200mV/**2V/20V** AC  
IA08 . . .AC-mA True RMS, **2/20/200**mA AC  
IA09 . . .AC-Amps True RMS, **0-1 Amp AC (0-100.00)**  
IA10 . . .AC-Millivolt, Scaled RMS, **100mV** AC  
IA11 . . .AC-Amps True RMS, **0-5 Amp AC (0-100.00)**  
IA12 . . .AC-Millivolt, True RMS, **100mV** AC  
ID01 . . .DC-Volts, **2/20/200V**/Custom w/24V DC Exc  
ID02 . . .DC-Millivolt, **20/50/100/200**mV DC w/24V DC Exc  
ID03 . . .DC-Milliamp, **2/20/200**mA DC w/24V DC Exc  
ID04 . . .DC-Amps, **5A** DC  
ID05 . . .DC-Volts **2/20/200**/Custom V DC w/Offset and 24V Exc  
ID07 . . .DC-Milliamp, **2/20/200**mA DC w/Offset and 24V Exc  
ID09 . . .DC-Amps, **1A** DC  
IF02 . . .Line Frequency, 50-500VAC, 199.9Hz, or optional 400Hz  
IGYZ\* . . .Universal Direct Pressure

\*View the IG- Ordering Code on page 13 to determine the value for Y & Z (IGAZ to IGKZ)

IP01 . . .Process Loop, **4-20mA(0-100.00)**  
IP02 . . .Process Loop, **4-20mA(0-100.00)** w/24VDC Exc  
IP03 . . .Process Input, **1-5V DC(0-100.00)** w/Offset, 24V Exc  
IP07 . . .Universal Process **2V/5V/10V/20V/200V/2mA/20mA**/Custom  
IPT1 . . .Prototype Board for Custom Design  
IR02 . . .3-Wire Potentiometer **1KΩ** min (0-F.S.)  
IR03 . . .Linear Potentiometer, 3-wire, **1KΩ** min

IR05 . . .Resistance **2KΩ**  
IS01 . . .Strain Gage 5/10VDC Exc., **20/2mV/V**, 4/6-wire  
IS02 . . .Pressure 5/10VDC Exc., **20/2mV/V**, 4/6-wire  
IS04 . . .Pressure Ext Exc., **20/2mV/V**, 4/6-wire  
IS05 . . .Pressure/Load Cell **20/2mV/V**, 5/10V Exc 4-wire  
IS06 . . .Pressure/Load Cell Ext Exc., **20/2mV/V**, 4-wire  
IS07 . . .Pressure **20/2mV/V** with High Impedance and External Excitation  
IT03 . . .RTD, **100Ω** Pt. **2/3/4-wire (-200 to 800°C)**  
IT04 . . .RTD, **100Ω** Pt. **2/3/4-wire (-200 to 1470°F)**  
IT05 . . .RTD, **100Ω** Pt. **2/3/4-wire (-190.0 to 199.0°F)**  
IT06 . . .Thermocouple, J Type **(0-1400 °F)**  
IT07 . . .Thermocouple, K Type **(0-1999°F)**  
IT08 . . .Thermocouple, J Type **(0-760 °C)**  
IT09 . . .Thermocouple, K Type **(0-1260°C)**

#### ► RELAY OUTPUT

R1 . . .Single 5A Form A Relay  
R2 . . .Dual 5A Form A Relays

### 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/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  
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-DBBZ96X24 . . . . .Black Bezel for 96x24mm Case  
75-DMTC96X24 . . . . .Side Slide Brackets (2 pc) - extra set, extra strength  
75-GBBZ144x2 . . . . .Black Bezel for 144x24mm Case  
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  
GN.CAS144X24 . . . . .Complete 144x24mm Case with bezel  
OP-MCLP96X24 . . . . .Screw Mounting Clips (2 pc) - to screw tighten slide brackets  
*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.

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