TEXMATE Since 1976 Smart Metering Smart Control

CL-B101D40

Smart 101 segment, 4 digit LED Tricolor or Mono-color digital bargraph controller with four fully programmable set points in a switchboard style case for monitoring, measurement, and control applications.

0.56" LEDs

LEOPARD FAMILY

CE RoHS COMPLIANT MADE IN U.S.A.

Specifications

Input Specs: ..... Depends on Input signal conditioner
A/D Converter: ..... 14 bit single slope
Accuracy: ..... ±(0.05% of reading + 2 counts)
Temp. Coeff.: ..... 100 ppm/°C (Typical)
Warm up time: ..... 2 minutes
Conversion Rate: ..... 10 conversions per second (Typical)
Digital Display: ..... **4 digit 0.56" LED red (std)**, green (optn)
Range –1999 to 9999 counts.
Bargraph Display: ..... **101 segment 235° circular red (standard)**,
Green (optional) or tricolor (optional) LED.
Polarity: ..... Assumed positive. Displays – negative
Decimal Selection: ..... Front panel button selectable, X•X•X•X•
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 9 Amp Form C relays, two 4 Amp Form A relays or 4 x 4 Amp Form A relays
Analog Output: ..... Isolated 16 bit user scalable mA or V
OIC (mA out) ..... 4-20 mA @ 0 to 500Ω 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 / 95-300 VDC, 50-400Hz 4.2W**
PS2 ..... 18-48 VAC / 10-72 VDC, 50-400Hz 4.2W
Operating Temp.: ..... 0 to 50°C
Storage Temp: ..... –20°C to 70°C
Relative Humidity: ..... 95% (non condensing)
Case Dimensions: ..... Bezel (4.48"x4.48") 113.8x113.8mm
Depth behind bezel (4.23") 107.46 mm
Plus (0.48") 12.24 mm for connectors
Weight: ..... 16 oz., 1lb 4 oz when packed

General Features

- External transmitters or signal conditioners can be eliminated by direct connection of the sensor output to more than 40 Plug-in Input Signal Conditioners that include:
  - – AC/DC Current
  - – AC/DC Voltage
  - – Load Cell
  - – Pressure
  - – Process
  - – Prototype
  - – Resistance
  - – Temperature
  - – 4 to 20 mA
- 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 ± 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.
- 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 9 Amp Form C, and two 4 Amp Form A or 4 x 4 Amp Form A relays available.
- Auto-sensing AC/DC power supply. For voltages between 85-265 V AC / 95-300 V DC (PS1) or 18-48 V AC / 10-72 V DC (PS2).
- 24 V DC excitation is available to power external 4/20mA 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%.
- 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.
- 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.
- Four programmable setpoints with adjustable Hysteresis.• Bargraph center zero function.
- Relay activation can be selected to occur above (hi) or below (Lo) each setpoint.
- Digital display blanking.
- Decimal point setting.
- Four-level brightness control