

TEXMATE

BN-45I

**24VDC Panel Meter
4 1/2 Digit 0.56" LED
in a 1/16 DIN Case**



Isolated 24VDC Powered LED Voltmeter in DIN 96x24mm Case.

General Features

The BN-45I is a 4 1/2 digit voltmeter in a compact 96x24mm case with isolated 24VDC power. Another version of the BN-45I, model BN-45, is also available with a non-isolated 5VDC power. The case has a short depth of just 2.83 inches (72mm) behind the panel.

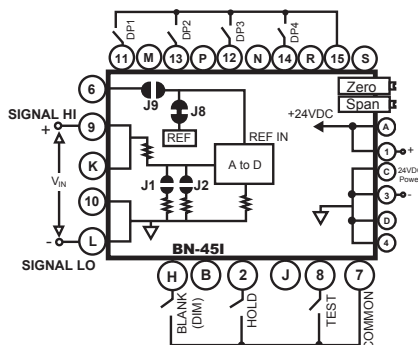
The meter has three user-selectable ranges of 2V, 20V and 200V. The BN-45I may also be calibrated at the factory for these ranges or specially scaled for other ranges (see Ordering Information below). Provision to offset the zero is also available as an option for 4-20mA signals.

The display is shipped standard with red LEDs, but green LEDs or super bright LEDs for high ambient light environments are also offered. Display Segments Test, Display Blank and Hold Reading are standard features.

Typical Application Connections

DC Volts Single-ended

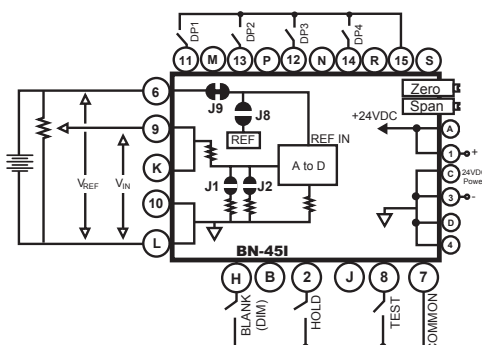
Measurement with a Resolution of 2V.



Ratiometric Voltmeter with External Reference

To use the BN-45I as a ratiometric voltmeter with an external reference, open J8 and close J9 jumpers. Connect as shown in the diagram.

NOTE: Signal Low is common to the 24VDC Power Ground.



Compatibility

The BN-Series have a matching DIN case style that is complementary to the Lynx, Leopard and Tiger family of meters. BN-Meters are the OEM's choice for economical switchboard and process indication. For economy, each model is dedicated to a specific application and designed for quick and easy installation.



Specifications

Input Configuration:Single ended with provision to offset zero

Full Scale Ranges:±1.9999VDC (standard) ±19.999VDC
±199.99VDC

Input Impedance:Approx. 1MΩ

Input Protection:±250VAC/DC for all range

Conversion Rate:3 readings per second

Accuracy:± (0.05% of reading + 3 digits)

Temp. Coefficient:10ppm/°C in ratiometric mode 50ppm/°C in 2V ranges

Maximum Resolution:100μV in 2V range.

Zero Stability:Autozeroed. 0.1 counts per °C

Display:0.56" high red LEDs. Display Hold, Blank and Test provided.

Overrange Indication:All digits flash to indicate overrange

Power Supply:24VDC at 100mA (standard) internally isolated
Optional 12V or 15V isolated supply

Operating Temperature:0°C to 60°C

Storage Temperature:-40°C to 85°C

Relative Humidity:95% (non condensing)

Case Dimensions:Bezel: 96X24 mm (3.62" X 0.95")
Depth behind bezel: 56.5 mm (2.23")
Plus 27 mm (1.06") for Push-On connector
or plus 17.5 mm (0.68") for Edge connector

Weight:85 gms (3 oz)
125 gms (4.4 oz) when packed

BN-Series, For Those Applications Where Space Is A Premium

BN-350.2/2/20/200V DC ranges, 3.5 digit, 5V DC Powered

BN-35BCDParallel or Multiplex BCD, 3.5 digit, 5V DC Powered

BN 35CI4 to 20mA Isolated 24V DC 3.5 digit

BN-40BCDParallel or Multiplex BCD, 4.0 digit, 5V DC Powered

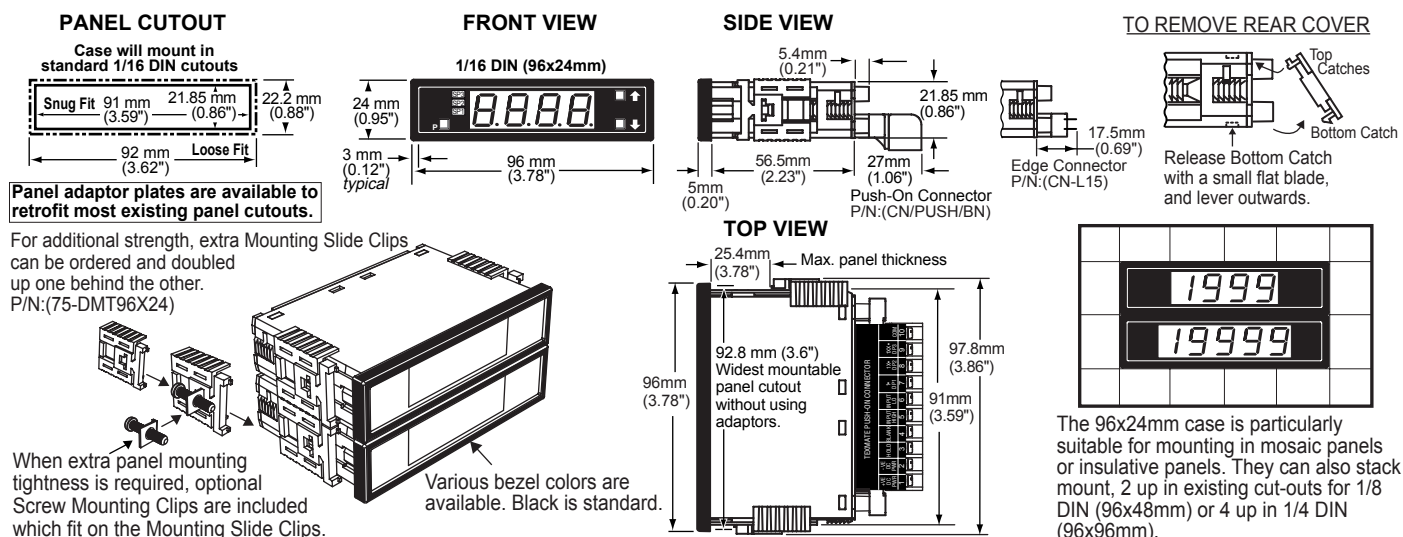
BN-452/20/200V DC ranges, 4.5 digit, 5V DC Powered

BN 45I2/20/200V DC ranges, Isolated 24V DC 4.5 digit



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BN Case Dimensions and Panel Cutouts



Ordering Information

Standard Options for this Model Number

Part Number	Description
► BASIC MODEL NUMBER Includes standard display and standard power supply unless optional versions are ordered.	
BN-45I	2/20/200V DC ranges, Isolated 24V DC, 4.5 digit
► DISPLAY	
STANDARD.....	Red LEDs, 0.56 inch high
BN-GREEN	Green LED, 0.56 inch high
BN-BRIGHT	Super bright Red LEDs, 0.56 inch high
► POWER SUPPLY	
STANDARD.....	Isolated 24V DC
V0-ISO/PS-09	Isolated 9V DC
V0-ISO/PS-12	Isolated 12V DC
V0-ISO/PS-15	Isolated 15V DC
► SPECIAL OPTIONS (Specify Inputs or Outputs & Req. Reading)	
HD-CHANGE	Range change from the standard input as shown in BOLD type
V0-50K	Zero offset potentiometer 50k
VRC-DPM	Range change for BN-35/BN-35I listed ranges

VRC-4/20Range change for BN-45I, 4 to 20mA
CB-FS35Non-Std Range and Scale Changes, 3.5 Digit Meters
CB-FS45Non-Std Range and Scale Changes, 4.5 Digit Meters

Special Options and Accessories

Part Number	Description
► ACCESSORIES (Specify Serial # for Custom Artwork Installation)	
CN-L15	PCB Edge Connector, Solder Type, Dual Row 15 Pins
CN-PUSH/BN	BN Series Push-on Screw Terminal Block Connector
75-DMT96X24	Side Slide Brackets, extra set (96x24mm only)
75-DBBZ96X24	Black Bezel for 96x24mm Case, BN and AM series
DN.CAS96X24	Din Case 96 X 24 Short Depth with Bezel
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.

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