

MODEL CUB4V/I - DC VOLTAGE OR DC CURRENT METER



- LCD, POSITIVE REFLECTIVE OR NEGATIVE TRANSMISSIVE WITH YELLOW/GREEN OR RED BACKLIGHTING
- FOUR SELECTABLE D.C. RANGES
0 to 199.9 mV, 1.999 V, 19.99 V, 199.9 V (CUB4V)
0 to 199.9 μ A, 1.999 mA, 19.99 mA, 199.9 mA (CUB4I)
- 0.6 INCH (15.2 mm) HIGH LCD DIGITS
- BUILT-IN SCALING PROVIDED
- AUTO ZEROING CIRCUIT
- SELECTABLE DECIMAL POINTS
- WIRE CONNECTIONS MADE VIA SCREW CLAMP TYPE TERMINALS
- FITS DIN STANDARD CUT-OUT 2.68" (68 mm) x 1.30" (33 mm)
- 9 TO 28 VDC POWERED



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NEMA 4X /
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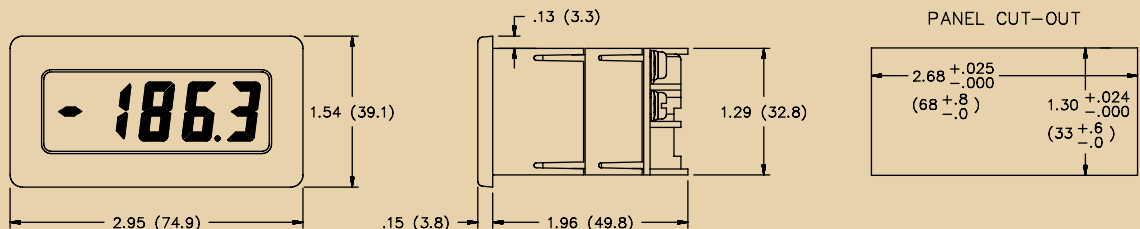
Product Features

The CUB4 Volt and Current Meters are designed and manufactured using the latest technology for a high quality, compact, affordable instrument for use in industrial environments. Each unit has a 3½-digit LCD display with 0.6 inch (15.2 mm) high digits and a DIP switch selectable decimal point. The displays are available in positive image reflective (black digits, reflective background) or negative image transmissive (illuminated digits, dark background) with red or yellow/green backlighting.

The units are constructed of a lightweight, high impact plastic case with a clear viewing window. The sealed front panel meets NEMA 4X/IP65 specifications for wash-down and/or dusty environments, when properly installed. A CUB4V or CUB4I unit can be mounted in the same panel cutout as the CUBVD and CUBID units.

The optional Micro Line/Sensor Power Supply (MLPS0000) is designed to attach to the rear of an installed CUB4V or CUB4I to provide the necessary power for the unit. The optional supply can be powered from either a 115 or 230 VAC source.

DIMENSIONS "In inches (mm)"



General Specifications

- DISPLAY:** 3½-digit (-1999 to 1999), 0.6" (15.2 mm) high digits. Minus (-) sign is displayed when voltage or current is negative.
- DECIMAL POINTS:** DIP switch selectable decimal points allow the display to be read in tenths, hundredths or thousandths.
- POWER REQUIREMENTS:**
Reflective Versions: 9 to 28 VDC at 4 mA max.
Backlight Versions: 9 to 28 VDC @ 35 mA typ., 50 mA max. Above 26 VDC, derate operating temperature to 50°C.
- CERTIFICATIONS AND COMPLIANCES:**
SAFETY
 EN 61010-1, IEC 1010-1
 UL Recognized Component, File#E179259
 Recognized to U.S. and Canadian requirements under the Component Recognition Program of Underwriters Laboratories, Inc.
ELECTROMAGNETIC COMPATIBILITY
 Immunity to EN 50082-2
 Emissions to EN 50081-2
- ENVIRONMENTAL CONDITIONS:**
Operating Temperature: 0° to 60°C (above 50°C, derate backlight operating voltage to 26 VDC maximum).
Storage Temperature: -40° to 80°C
Operating and Storage Humidity: 85% max relative humidity (non-condensing) from 0 to 60°C.
Temperature Coefficient: 100 PPM/°C
Altitude: Up to 2000 meters.
- CONSTRUCTION:** High impact plastic case with clear viewing window. (Panel gasket and mounting clip included.) This unit is rated for NEMA 4X/IP65 indoor use. Installation Category II, Pollution Degree 2
- WEIGHT:** 3.3 oz. (93.5g)

Input Specifications

- INPUT RANGES:**

D.C. VOLTAGE (DIP Switch Selectable)	D.C. CURRENT (JMPR. Selectable)
±199.9 mVDC	±199.9 µADC
±1.999 VDC	±1.999 mADC
±19.99 VDC	±19.99 mADC
±199.9 VDC	±199.9 mADC
- ACCURACY:** (@ 23°C, less than 85% RH)
D.C. Voltage: ±(0.1% + 1 digit)
D.C. Current:
199.9 µA, 1.999 mA, 19.99 mA ranges: ±(0.1% + 1 digit)
199.9 mA range: ±(0.15% + 1 digit)
- OVERRANGE RATINGS, PROTECTION & INDICATION:**
 9 to 28 VDC power circuit is not isolated from the signal circuit.
Max Input Voltage:
0 to 199.9 mVDC Range: 75 VDC
All other voltage Ranges: 300 VDC
Max Input Current:
199.9 µA through 19.99 mA: 10 times max. range current
199.9 mA: 1 amp
Overrange Indication: Overrange is indicated by a "1" displayed in the most significant digit and the blanking of the three least significant digits.
- READING RATE:** 2.5 readings per second
- RESPONSE TIME:** 1.5 seconds to settle for a step change
- NORMAL MODE REJECTION:** 60 dB 50/60 Hz
- INPUT IMPEDANCE:**
Voltmeter: 1 MΩ
Current Meter:
 199.9 µA - 1 KΩ
 1.999 mA - 100 Ω
 19.99 mA - 10 Ω
 199.9 mA - 1 Ω

Ordering Information

MODEL NO.	DESCRIPTION	PART NUMBERS
CUB4V	DC Voltmeter	CUB4V000
	DC Voltmeter W/Yel-Grn Backlighting	CUB4V010
	DC Voltmeter W/Red Backlighting	CUB4V020
CUB4I	DC Current Meter	CUB4I000
	DC Current Meter W/Yel-Grn Backlighting	CUB4I010
	DC Current Meter W/Red Backlighting	CUB4I020
MLPS	Micro Line/Sensor Power Supply	MLPS0000