

DP-2000A Series

High Resolution, Low cost 4¹/₂-Digit, Dual-Range Miniature LCD Panel Meters



Description

The DP-2000A Series is a highly accurate, high-resolution measurement device in a miniature panel meter package. This 4¹/₂-digit LCD meter consumes very little power (about 15mW), and requires only 0.73" of space behind the panel. The combination of small size, low power, and high performance make this the meter of choice for a broad range of applications requiring portability and precision.

Three input voltage ranges are offered: $\pm 200\text{mV}$, $\pm 2\text{VDC}$, and $\pm 20\text{VDC}$. Automatic polarity, overrange indication, adjustable decimal point, and display HOLD are standard features.

The snap-in bezel packaging enables easy and rapid installation of the meter. A 13-pin connector is available as an option. Call to ask about backlit versions of this meter.

Features

- 4¹/₂-digit resolution - $\pm 19,999$ counts
- High accuracy - $\pm 0.02\%$ typical error
- 3 voltage ranges
- Very low power consumption (15mW)
- 5VDC Power
- Convenient snap-in bezel package
- User-selectable decimal point
- Hold-display function
- Overvoltage protection
- Quantity discounts

Applications

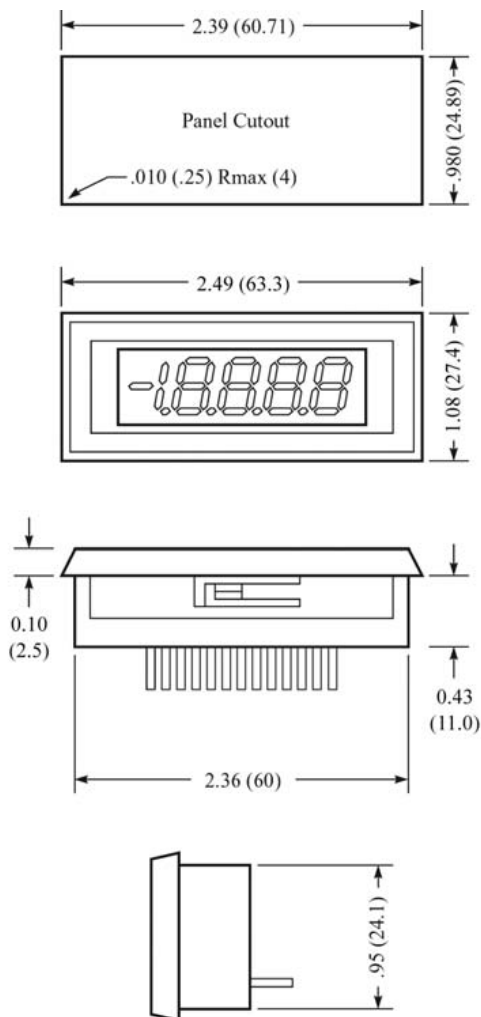
- Laboratory instruments
- Medical instruments
- Biochemical/biomedical equipment
- Electronic test equipment
- High accuracy/precision measurements

Ordering Information

Model	Description
DP-2000A	Hi-res LCD 5V DPM $\pm 200\text{mV}$, $\pm 2\text{V}$
DP-2002A	Hi-res LCD 5V DPM $\pm 2\text{V}$, $\pm 20\text{V}$
DP-2020A	Hi-res LCD 5V DPM $\pm 20\text{V}$
C-14	Connector (13 pin)
APS-5	120V AC to 5V DC Power Supply

DP-2000A Series

Dimensions



inches (mm)

Connections

Pin No.	Pin Name	Description
1	V+	Positive supply connection
2	V-	Negative supply connection
3	INHI	Input high terminal
4	INLI	Input low terminal
5	D1	Decimal point = 000.0
6	D2	Decimal point = 00.00
7	D3	Decimal point = 0.000
8	D4	Decimal point = .0000
9	DP	DP common - connect to decimal points to activate
10	RNG	10:1 range - connect to V+ to activate
11	HOLD	Hold feature - connect to V+ to activate
12	NC	
13	NC	

Specifications

Display	Digits	4 ½ (19999 count)
	Type	7-segment LCD
	Digit Height	.50in (12mm)
	Polarity Indication	Automatic "-" for neg input
	Decimal Point	4 position selectable
	Overrange Indication	1--- for positive, -1--- for negative
	Other Features/Options	Display hold function
Signal Inputs	Configuration	Single-ended
	Full-Scale Input	±200mV, ±2V, ±20V
	Input Offset Adjustment	Auto zero
	Input Impedance	>100MΩ (±200mV), 1MΩ (other ranges)
	Common Mode Range	±1VDC
	Common Mode Rejection	>86dB
	Protection	±350VDC
	Input Bias Current	1pA typical, 100pA max
	Control Inputs	Dec pt select, hold, 10:1 range
	Performance	Sampling Rate
Accuracy		±(0.06% + 1 count) max (10:1 range: ±0.12%)
Warmup, typical		10 min
Temperature Drift, typical		100ppm/°C
Power Supply Requirements		
	Supply Voltage	5V: +5VDC ±5% @ 3mA
Physical	Package Style	Snap-in bezel
	Dimensions	2.49 x 1.02 x 0.83
	Panel Cutout	2.39 x .98
	Weight	1.1oz (30g)
	Connector	C14 (13-pin) optional
	Bezel	Snap-in bezel included
Environmental Requirements		
	Operating Temperature	0 to 50°C
	Storage Temperature	-20 to 70°C
	Relative Humidity	0 to 95% non-condensing