



- 3/64 DIN Indicator
- Unique mounting bracket allows stacking of multiple units
- Screw terminal connectors for easy installation
- 3-1/2 or 4-1/2 digit LCD display with optional negative red backlighting

Specifications

DISPLAY	7-segment LCD
Type	0.5" (12.7mm)
Height	3 or 4 position user-programmable
Decimal point	Most significant digit = "1", other digits blank
OVERRANGE indication	Optional negative image, red backlighting
Backlighting	Auto with "-" indication, "+" implied
POWER REQUIREMENTS	
AC Volt	85-250VAC @ 40-440Hz
DC Volt	9-32DCV
Power Consumption	2.5VA min/4VA max
85-250VAC	1.5VA min/3VA max
9-32DCV	250VRMS
Rated Circuit to Ground Voltage	
ACCURACY @ 25°C	
200 Hz	±0.2% of input ± 0.2Hz
2 KHz	±0.2% of input ± 2 Hz
DC V & A M235	±0.1% of reading ± 1 count
DC V & A M245	±0.04% of reading ± 1 count
DC 2A M235 & M245	±0.25% of reading ± 1 count
DC 5A M235 & M245	±0.5% of reading ± 1 count
AC TRMS V & A M235	±0.5% of reading ± 5 counts
AC TRMS V & A M245	±0.5% of reading ± 50 counts
DC Process M235	±0.01% of reading ± 1 count
DC Process M245	±0.01% of reading ± 1 count
Excitation Max. Current	25mA
ENVIRONMENTAL	
Operating Temperature	0 to 55°C
Storage Temperature	-10 to 60°C
Relative Humidity	0 to 85% non condensing @ 40°C
Temperature Coefficient	0.2% of input ± 0.5 digits/°C
Warmup time	Less than 20 minutes
NOISE REJECTION	
CMRR	86dB Typical
A TO D CONVERSION	
Technique	Integrating
Rate	3 samples/second typical
FREQUENCY	
Technique:	Frequency-to-voltage
INPUT LEVEL (Frequency)	500mV to 750VRMS at 1.0MΩ impedance OR 5V to 24V S quare Wave (DC offset 2V max)
TEMPERATURE COEFFICIENT	.02% of reading ± .2 digits/°C
MECHANICAL	
Bezel:	0.94" x 2.83"
Depth:	2.36"
Panel cutout:	0.89" x 2.71" (22.6mm x 68.8mm)
Weight:	3.5oz (99g)
Case Material:	94-0,UL-rated, glass-filled thermoplastic

Inputs

DC Voltage

Range	Resolution M235	Resolution M245	Input Impedance	Max Input Infused
200mV	100µV	10µV	>10MEG	100Vdc
2V	1mV	100µV	>10MEG	250Vdc
20V	10mV	1mV	>10MEG	250Vdc
200V	100mV	10mV	>9.9MEG	250Vdc

DC/AC TRMS Current

Range	Resolution M235	Resolution M245	Voltage Drop	Max Input Infused
200µA	100nA	10nA	200mVdc	10mA
2mA	1µA	100nA	200mVdc	40mA
20mA	10µA	1µA	200mVdc	100mA
200mA	100µA	10µA	200mVdc	400mA
2A	1mA	100µA	200mVdc	3A
5A	10mA	1mA	50mVdc	6A

AC TRMS Voltage

Range	Resolution M235	Resolution M245	Input Impedance	Max Input Infused
200mV	100µV	10µV	>500K	10Vac
2V	1mV	100µV	>100K	100Vac
20V	10mV	1mV	>1MEG	200Vac
200V	100mV	10mV	>1MEG	200Vac
270V	1V	100mV	>1MEG	270Vac

DC Process

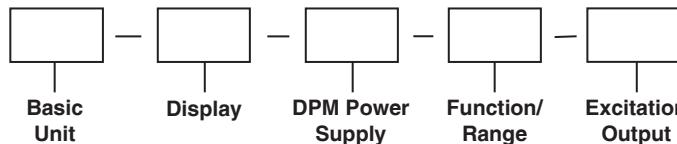
Range	Resolution M235	Resolution M245	Voltage Drop	Max Input Infused
4 to 20mA	0.10%	0.01%	200mVdc	60mA
1 to 5Vdc	0.10%	0.01%	Input Impedance	
0 to 10Vdc	0.10%	0.01%	>10MEG	250Vdc
0 to 100Vdc	0.10%	0.01%	>10MEG	250Vdc

Mounting Requirements: see page A6

[more >>](#)

Ordering Information

Mini-Max Indicators can be configured by making an entry in each section. Example: M245-1-0-71-0.



Selection	Description	Selection	Description
Basic Unit			Function/Range (continued)
M235 M245	3-½ Digit LCD 4-½ Digit LCD	31 32 33 34 36	200 mVAC TRMS 2 VAC TRMS 20 VAC TRMS 200 VAC TRMS 270 VAC TRMS
Display			
0 1	Non Backlit Negative Red Backlight	41 42 43 44 45 46	200 AC μ A TRMS 2 ACmA TRMS 20 ACmA TRMS 200 ACmA TRMS 2 ACA TRMS 5 ACA TRMS
DPM Power Supply			
0 2	85-250 ACV 9-32 DCV*	71 72 73 74	4-20 DCmA (DC Process) 1-5 DCV (DC Process) 0-10 DCV (DC Process) 0-100 DCV (DC Process)
Function/Range			
11 12 13 14	200 DCmV 2 DCV 20 DCV 200 DCV	81 (M235) 82 (M235) 83 (M235) 84 (M235)	20-199.9 Hz RMS 20-1999 Hz RMS 20-199.9 Hz Sq. Wave 20-1999 Hz Sq. Wave
21 22 23 24 25 26	200 DC μ A 2 DCmA 20 DCmA 200 DCmA 2 DCA 5 DCA	0 1 2	None 12 DCV @ 25mA 24 DCV @ 25mA
Excitation Output (N/A w/Frequency)			

* Not Available on Frequency (Hz) Meters