

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

Simpson®
MADE IN THE USA SINCE 1936 RELIABILITY BEYOND MEASURE

Mini-Max M235 & M245 Digital Panel Meters



LCD



LED

- **3/64 DIN Indicator**
- **Unique mounting bracket allows stacking of multiple units**
- **Screw terminal connectors for easy installation**
- **LCD: 3-1/2 or 4-1/2 digit, 0.5” high LCD display with optional negative image, bright red backlighting**
- **LED: 3-1/2 digit, 0.56” high display**
- **LED: 4-1/2 digit, 0.40” high display**
- **Limited range display scaling**

Simpson®
MADE IN THE USA SINCE 1936 RELIABILITY BEYOND MEASURE

Mini-Max M235 & M245 Digital Panel Meters

Specifications

	LCD		LED	
	M235	M245	M235	M245
DISPLAY				
Type	7 segment			
Height	0.5" (12.7 mm)		0.56" (14.2 mm)	0.4" (10.2 mm)
Decimal Point (Selectable)	3 position	4 position	3 position	4 position
Overrange Indication	Most significant digit = "1"		Blinking Display	
Backlighting	Optional negative image, Red Backlight		N/A	
Polarity	Auto with " - " indication, " + " implied			
POWER REQUIREMENTS				
AC Volt	85 - 250 VAC @ 40 - 440Hz			
DC Volt	9 - 32 DCV		Not Available	
POWER CONSUMPTION				
85 - 250 VAC	LCD 4.0 VA (2.4W) Max.		3.6 VA (2.16W) Max.	
9 - 32 DCV	LCD 3W Max		Not Available	
ISOLATION	250 VRMS Max			
ACCURACY @ 25º C				
200 Hz	± 0.2% of input ± 0.2 Hz	Not Available		
2 KHz	± 0.2% of input ± 2 Hz			
DC V & A	± (0.1% of Reading ± 1 count)	± (0.04% of Reading ± 1 count)	± (0.1% of Reading ± 1 count)	± (0.04% of Reading ± 1 count)
DC 2A	± (0.25% of Reading ± 1 count)			
DC 5A	± (0.5% of Reading ± 1 count)			
AC TRMS V & A	± (0.5% of Reading + 5 count) (50 Hz - 2 KHz)	± (0.5% of Reading + 50 count) (50 Hz - 2 KHz)	± (0.5% of Reading + 2 count) (50 Hz - 5 KHz)	± (0.5% of Reading + 10 count) (50 Hz - 5 KHz)
DC Process	± (0.02% of Reading ± 1 count)			
EXCITATION CURRENT	25mA (Maximum)			
ENVIRONMENTAL	0 to 55ºC			
Storage Temperature	-10 to 60ºC			
Relative Humidity	0 to 85% non condensing @ 40ºC			
Temperature Coefficient	0.2% of input ± 0.5 digits / ºC			
WARM-UP TIME	Less than 20 minutes			
NOISE REJECTION CMRR	86 dB Typical			
A TO D CONVERSION Technique	Integrating Dual Slope			
Rate	3 samples/second typical			
FREQUENCY METER				
Technique	Frequency-to-voltage	Not Available		
INPUT LEVEL				
(Frequency Meter)	500mV to 270 VRMS @ 1.0 Meg ohm or 5V to 24V SquareWave (DC offset = 2Vmax)	Not Available		
MECHANICAL				
Bezel	0.95" x 2.84" (24 mm x 72 mm)			
Depth	2.36" (60 mm)			
Panel Cutout	0.88" x 2.68" (22.2 mm x 68 mm)			
Weight	3.5 oz. (99.2 g)		2.6 oz. (74 g)	
Case Material	94-0, UL-rated, glass-filled thermoplastic			

Mini-Max M235 & M245 Digital Panel Meters

Inputs

DC Voltage

Range	Resolution M235	Resolution M245	Input Impedance	Max Input Unfused
200mV	100µV	10µV	10MEG	100VDC
2V	1mV	100µV	10MEG	250VDC
20V	10mV	1mV	10MEG	250VDC
200V	100mV	10mV	9.9MEG	250VDC
600V	1V	100mV	9.9MEG	600VDC

DC/AC TRMS Current

Range	Resolution		LCD		LED	
	M235	M245	Voltage Drop	Max Input Unfused	Voltage Drop	Max Input Unfused
200µA	100nA	10nA	200mVDC	10mA	200mVDC	6mA
2mA	1µA	100nA	200mVDC	40mA	200mVDC	20mA
20mA	10µA	1µA	200mVDC	100mA	200mVDC	60mA
200mA	100µA	10µA	200mVDC	400mA	200mVDC	300mA
2A	1mA	100µA	200mVDC	3A	200mVDC	2.6A
5A	10mA	1mA	50mVDC	6A	100mVDC	6A

AC TRMS Voltage

Range	Resolution M235	Resolution M245	Input Impedance	Max Input Unfused
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
600V	1V	100mV	9.9MEG	600VAC

DC Process

Range	Resolution M235	Resolution M245	Voltage Drop	Max Input Unfused
4 to 20mA	0.1%	0.01%	200mVDC	60mA
			Input Impedance	
1 to 5VDC	0.1%	0.01%	10 MEG	250VDC
0 to 10VDC	0.1%	0.01%	10MEG	250VDC
0 to 100VDC	0.1%	0.01%	10MEG	250VDC

Simpson®
MADE IN THE USA SINCE 1936 RELIABILITY BEYOND MEASURE

Mini-Max M235 & M245 Digital Panel Meters

Ordering Information -

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

Basic Unit	Display	DPM Power Supply	Function/ Range	Excitation Output

Select From Each One Below		
Basic Unit		
	M235	3-1/2 Digit
	M245	4-1/2 Digit *

Display		
	0	Non Backlit (LCD)
	1	Negative Red Backlight (LCD)
	2	Red (LED)

DPM Power Supply		
	0	85 - 250 ACV
	2	9 - 32 DCV * & **

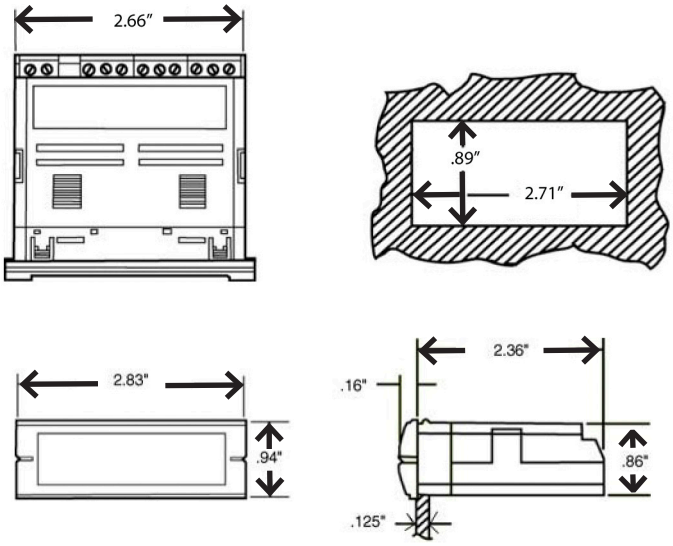
Function / Range		
	11	200 DCmV
	12	2 DCV
	13	20 DCV
	14	200 DCV
	15	600 DCV †
	21	200 DCµA
	22	2 DCmA
	23	20 DCmA
	24	200 DCmA
	25	2 DCA
	26	5 DCA

*	Not Available on Frequency (Hz) Meters
**	Not Available on LED Display
***	Not Available on M245
†	Not Available on LCD Display

Select From Each One Below		
Function / Range (continued)		
	31	200 VAC TRMS
	32	2 VAC TRMS
	33	20 VAC TRMS
	34	200 VAC TRMS
	36	270 VAC TRMS **
	35	600 VAC TRMS †
	41	200 ACµA TRMS
	42	2 ACmA TRMS
	43	20 ACmA TRMS
	44	200 ACmA TRMS
	45	2 ACA TRMS
	46	5 ACA TRMS
	71	4 - 20 DCmA (DC Process)
	72	1 - 5 DCV (DC Process)
	73	0 - 10 DCV (DC Process)
	81	20 - 199.9 Hz RMS ** & ***
	82	20 - 1999 Hz RMS ** & ***
	83	20 - 199.9 Hz Sq. Wave ** & ***
	84	20 - 1999 Hz Sq. Wave ** & ***

Excitation Output		
	0	None
	1	12 DCV @ 25mA *
	2	24 DCV @ 25mA *

Dimensions - M235, M245 & M240

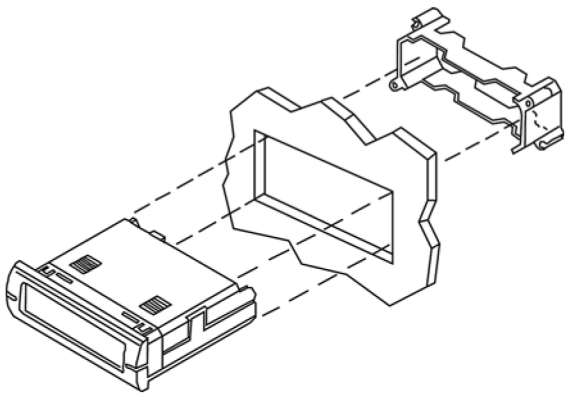


Mounting Requirements -

Insert the Mini-Max through the panel, and then slide the mounting bracket on to the Mini-Max.

The mounting bracket allows Mini-Max units to be stacked side-to-side or top-to-bottom.

Panel cutout instructions for stacking multiple units are provided in the operator's manual.



Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP