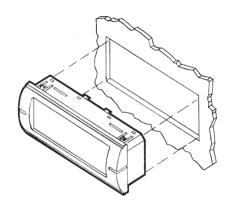
# Mini M135 & M145 Digital Panel Meters



- 3/64 DIN Indicator
- Minimum depth requires less than 0.7" (17mm) behind the panel
- Snaps right into panel no mounting hardware required

Input Specifications			
DC Voltage			
Range	M135 Resolution	Input Impedance	Max Input (Unfused)
200mV	100μV	>100MΩ	50V
2V	1mV	10ΜΩ	250V
20V	10mV	10ΜΩ	250V
200V	100mV	10ΜΩ	250V

DC Current				
Range	M135 Resolution	Voltage Drop	Max Input (Unfused)	
200μΑ	100nA	200mV	10mA	
2mA	1μΑ	200mV	40mA	
20mA	10μΑ	200mV	100mA	
200mA	100μΑ	200mV	400mA	



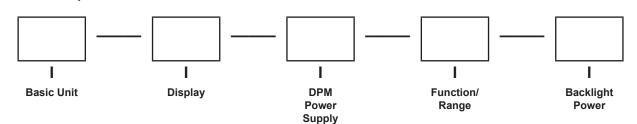
Specifications			
	DISPLAY		
Туре	7- segment LCD		
Height	0.5" (12.7mm)		
<b>Decimal Point Position</b>	User-Selectable		
Overrange Indication	Most significant = "1" other digits blank		
Backlighting	Optional negative image, red backlighting at 5, 10. 12, 24 or 48 DCV		
Polarity	Auto with "-" indication, "+" indication implied		
PO	WER REQUIREMENTS		
DC Power	±5V, +5V and +9V Low Power Indication included with 9V units		
Power supply current	2mA max		
Backlight supply current	50mA typical For 24 and 48 DCV, 10mA typical		
ACCURACY @ 25°C	3 1/2 digit: ± (0.1% of reading + 1 count)		
_	4 1/2 digit: ± (0.04% of reading + 1 count)		
	ENVIRONMENTAL		
Operating Temperature	0 to 55°C		
Storage Temperature	-10 to 60°C		
Relative Humidity	0 to 85° non-condensing @ 40°C		
Warmup time	Less than 20 minutes		
Temperature Coefficient	(All inputs) ± (0.02% of input ± 0.2 digit) / °C		
	NOISE DE IECTION		
NMDD	NOISE REJECTION		
NMRR	60dB, 50/60 Hz		
CMRR	(with 1KΩ unbalanced @ 60Hz) 90dB min		
Δ	TO D CONVERSION		
Technique Integrating			
Rate	3 samples/second-typical		
	- Campion South		
MECHANICAL			
Bezel 0.94" x 2.83"			
Depth	0.43"		
Panel cutout	0.89" x 2.71" (22.6 mm x 68.8 mm)		
Weight	1.0 oz. (28.3 g)		
Case Material	94-VO, UL-rated ABS		



## Mini M135 & M145 Digital Panel Meters

#### **Ordering Information -**

Mini indicators can be configured by making an entry in each section below. Example: M135-0-2-11-0



Select From Each One Below			
Basic Unit			
M135	3 1/2 Digit LCD		
M145	4 1/2 Digit LCD		

Display		
	0	Non Backlit
	1	Negative Red Backlight

DPM Power Supply		
	0	+ 5 DCV
	1	± 5 DCV
	2	+ 9 DCV

Select From Ea		
Function / Range		
11	200 DCmV	
12	2 DCV	
13	20 DCV	
14	200 DCV	
21	<b>200 DC</b> μ <b>A</b>	
22	2 DCmA	
23	20 DCmA	
24	200 DCmA	

ch One Below			
	Backlight Power		
		0	None
		1	5 DCV
		2	10 DCV
		3	12 DCV
		4	24 DCV
		5	48 DCV

### **Mounting Requirements -**

The Mini indicators require a panel cutout of 2.71" (68.8mm) wide by 0.89" (22.6mm) high, and a panel area of 0.94" (24mm) high by 2.83" (72mm) wide.

The depth behind the panel, including terminals, is 0.7" (17.8mm).

The front bezel protrudes 0.16" (4mm) from the front of the mounting surface.

The unit will snap-mount into panels from 0.050" to 0.125" thick.

A 12-pin connector with 6" wire leads is included with each unit for quick installation.

#### Installation and Panel Cutout -

