

# **1800 Series Big Digit Panel** Meter



Jewell's 1800 Series Digital Panel Meters offer LCD large digit .98" (24.9mm) 3 1/2 digit displays and LED .8" (20.3mm) 3 1/2 digit displays in orange, green or red for easy and precise viewing from all distances.

#### 1800 Series Digital Panel Meter Specifications

- · ·	
Performance	
Accuracy	± (0.05% FS +1 counts)
Conversion Rate	3 per second
Normal Mode Rejection	>30 db @ 60 Hz
Common Mode Range	±1V DC
Common Mode Rej.	>86 dB
Zero Adjustment	Automatic
Warmup	10 Minutes Typical
Temperature Coeff.	±100 ppm per °C Typical
Mounting	Snap-in panel mount
Connection	4 screw terminal (4-20MA)
	13 pin male connection (voltage)
	13 pin connector/wiring harness (included)
Inputs	
Ranges	±200.0mV, ±2.000V, ±20.00V DC, 4-20mA
Configuration	Bipolar, Differential
Protection	±350V DC, (±100V DC on 200mV Range)
Impedance	>1 Megohm, (>10 Megohm on 200mV Range)
Environment	
Operating Range	-10 to 50°C
Storage Range	-40 to 75°C
Power Supply	
+5VDC	180mA LED, 3mA LCD
Loop Power	Powered by mA control loop
24 VDC LCD Meters	4-20mA input, w/ or w/o backlighting
Display	
Polarity	Automatic, "-" displayed
Decimal Points Overload	3 Position, user selectable
Ovenudu	Three lower order digits blank for inputs >1999 & < -1999
Hold	Display hold function is standard
Annunciators	PSI, PSI, °F, °C, % (user energized)



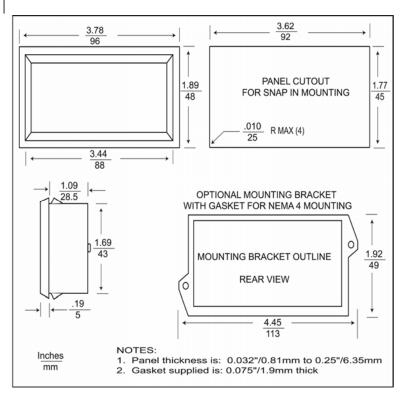
#### **Features**

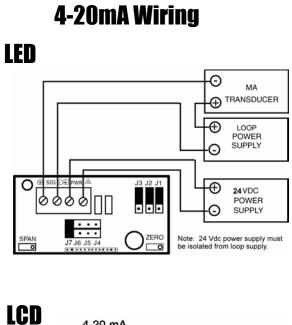
- LCD
  - > Decimal point user selectable
  - > Eng. units user selectable
  - > Snap-in panel mounting
  - > Large .98" digits for easy viewing
- $\geq$ LED
  - > Decimal point user selectable
  - > Snap-in panel mounting
  - > Large .8" digits for easy viewing
- $\triangleright$ All Models
  - Gasket and clamp provided for optional NEMA applications

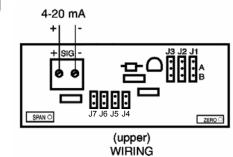


1800 Series Digital Panel Meter

# **Cutout Diagram**







# **Ordering Information:**

Complete part number by filling in the four boxes

180 🗌 🗌			1/8 DIN Digital Panel Meter						
			Display (1 red LED; 2 green LED; 3 LCD)						
	Input (1 voltage; 2 current; 3 °F RTD; 4 °C RTD)								
			Input Range:						
		Current	Voltage	Temperature RTD Pt100 $\Omega$					
	<b>1 1</b> 4-20mA+		4-20mA+0-100.0	2V	-60 to 400°F or -50 to 200°C				
<b>1 2</b> 200		200mA	200mV	400 to 752°F or 200 to 400°C					
<b>2 1</b> 2mA			2mA	-					
22-		20V							
	<b>2 3</b> 2A (with shunt)*								
	2	4	20A (with shunt)*						
	2	Х	Specify custom range/scaling						
180500	B0500 Loop Powered 1/8 DIN DPM, LCD, 4-20mA=0-100.0								
	(Offset –350 to 350 counts; Span 400 to 2000 counts)								
*Shunt not included									



For over 60 years, Jewell Instruments and our predecessor companies have provided high quality panel meter solutions for a wide range of aerospace, industrial and commercial applications. JEWELL and MODUTEC are some of the most trusted brands in the industry. They are known for:

- reliable, high quality, products
- superb applications knowledge
- custom designs for unique requirements
- "extended staff" relationships with customers
- creative engineering expertise

#### Jewell Instruments

The only panel meter manufacturer that offers a full spectrum of panel meters. Analog, digital. Any size, and shape. Surface mount, window mount, bezel mount. We have decades of broad-based experience resulting in our superior breadth of product — and our ability to meet your custom needs. Jewell Instruments can provide a proven, quick and cost-effective solution to your panel meter needs.

Analog panel meters can be either electrical or electronic. Application areas include:

#### **Electrical**

- Field Strength Meters
- Power Generation
- Power Distribution Panel
- Control Panels
- Switchgear Panels
- Power Supplies
- Power Conditioners
- Voltage Regulators
- UPS Systems
- Automatic Transfer Switches
- Generator Paralleling Switchgear

### **Electronic**

<ul> <li>Liquid Level</li> <li>Flow</li> <li>Pressure Monitors</li> <li>Volume Units</li> <li>Laboratory Equipment</li> </ul>	<ul> <li>Temperature</li> <li>Battery Level</li> <li>Speed</li> <li>Tension Control</li> <li>Kilns</li> </ul>
<ul> <li>Test Equipment</li> </ul>	<ul> <li>Marine</li> </ul>

#### Digital panel meter applications include:

#### Digital

- Telecommunications
- Welders
- Agricultural
- Water Purification
- Desalinization

	jital Panel Meters									
nia	ital Panel V									
		Categories								
		BL Series	1000 Series	BGE Series	PMC Series	2000 Series	2100 Series	DW Series	1800 Series	
	Display									
	LCD	•	•	•	•	•	•	•	•	
	Backlit LCD	•	•	•	•	•	•			
	LED						•		•	
	Mounting									
	Surface	•	•					•		
	Window	•		•	•			•		
	Bezel	•	•	•		•	•	•	•	
	Connections									
	Pins	•	•	•						
	Solder Pads	•								
	Screw Terminal Connector	•			•	•	•		•	
	Banana Plugs				•					
	Inputs									
	DC Volt	•	•	•		•	•	•	•	
	DC AMP	•	•	· ·	•	•	•	•	•	
	AC Volt	•	-		-	•	•	•		
	AC AMP	•				•	•	•		
	Frequency	•				•	•			
	RTD	•				•	•		•	
	Thermocouple	•				•	•			
	DPM Power									
	5 Volt DC	•	•	•						
	+/- 5 Volt DC	•	•	•					-	
	9 Volt DC	•	•	•				•		
	Loop Powered	•	•	•	•	•	•	•		
	115 VAC	•				•	•	•		
	230 VAC	•				•	•	•		
	12 or 24 VDC (Isolated)	•				•	•			
	12 of 24 VDC (Isolated) 10 to 28 VDC (Isolated)					-				
	10 to 30 VDC (Isolated)	•	•					•		
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## DW Series - MODUTEC

The *DW* is the digital version of an analog standard, the power monitor. No separate power supply is needed, and with no additional wiring, there is no additional installation time. The *DW Series* can easily replace an existing analog power monitor.

## 1800 Series — **Jewe**

The *1800 Series* is our BIG DIGIT 1/8" DIN digital meter series. The 3.5 digit are .98" high on the LCD choice and .8" high on the LED display. The big digits and easy-to-read red or green displays make the *Series 1800* a must have for a small meter, big results application.





AC AMPERE