

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

- Liquid Level
- Flow
- Pressure Monitors
- Volume Units
- Laboratory Equipment
- Test Equipment
- Broadcast Equipment
- Stereo Equipment
- Medical
- Temperature
- Battery Level
- Speed
- Tension Control
- Kilns
- Marine
- Chart Recorders
- Field Strength

Digital panel meter applications include:

#### Digital

- Telecommunications
- Welders
- Agricultural
- Water Purification
- Desalinization

# Key

Meter Codes	Shape
1 = Surface Mount	V=Vertical
2 = Window Mount	H=Horizontal
3 = Bezel Mount	Med = Medallion
4 = Edgewise	Sq = Square
5 = Switchboard	R=Round
	Rec = Rectangle

# Analog Panel Meters

Model	Page	Mount Code	Shape	Sizes								Accuracy				AC Rectified	AC Iron Vane	DC	Self-Shielding
				1 1/2"	2"	2 1/2"	3 1/2"	4 1/2"	5"	5 1/2"	6"	8"	2%	3%	4%				
<b>Surface Mount</b>																			
S Series	4	1	Rec	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2810 Series	4	1	Sq			•	•					•	•			•	•	•	
PB Series	4	1	Sq	•	•	•	•					•	•			•	•	•	
HS Series	5	1	R	•	•	•						•	•			•	•	•	
45 Series	5	1	Sq					•				•	•			•	•	•	
50 Series	5	1	R, Rec		•	•		•				•	•			•	•	•	
MS Series	6	1	Rec	•	•	•						•	•			•	•	•	
200 & 300 Series	6	1	R		•	•						•	•			•	•	•	
72 Series	6	1	Sq		•	•								•		•	•	•	
73 Series	6	1	R		•									•		•	•	•	
25 Series	6	1	R			•					•					•	•	•	
Model 133 & 135	7	1	Sq	•								•	•	•		•	•	•	
Model 4632 & 4652	7	1	R				•					•	•			•	•	•	
Model 3432 & 3452	7	1	R			•						•				•	•	•	
Model 443 & 445	7	1	R				•					•				•	•	•	
Model 35	7	1	R				•					•	•			•	•	•	
55 & 56 Series	8	1	Sq			•								•		•	•	•	
MM Series	8	1	Med	•		•	•					•	•			•	•	•	
MAS Series	8	1	Rec	•	•	•								•		•	•	•	
OMS & MSQ Series	8	1	Rec	•	•									•		•	•	•	
42 & 44 Series	8	1	Sq			•								•		•	•	•	
<b>Window Mount</b>																			
World Meter	9	2	Rec	•	•	•	•					•	•			•	•	•	
W Series	9	2	Rec	•	•	•	•	•		•		•	•			•	•	•	
<b>Bezel Mount</b>																			
SWM Series	9	1,2,3	Rec			•	•	•				•	•			•	•	•	
55 Series	9	1,2,3	Sq				•							•		•	•	•	
2000 Series	10	1,3	Sq			•		•	•			•				•	•	•	
70 Series	10	1,3	Sq	•	•	•		•	•	•		•	•			•	•	•	
BA Series	10	3	Rec	•	•	•		•	•			•	•			•	•	•	
58 Series	10	3	Rec		•									•		•	•	•	
<b>Edgewise</b>																			
E Series	11	4	H,V		•							•				•	•	•	
MD & ME	11	4	H,V	•	•									•		•	•	•	
13 & 13F	11	4	H,V		•									•		•	•	•	
Model 12	11	4	H,V	•										20%		•	•	•	
802 Series	11	4	H											•		•	•	•	
Model 111	12	4	H,V	•								•	•			•	•	•	
Model 121	12	4	H,V		•							•	•			•	•	•	
Model 131	12	4	H,V			•						•	•			•	•	•	
Model 231	12	4	H,V			•						•	•			•	•	•	
<b>Switchboard</b>																			
2830 Series	13	5	Sq				•					•				•	•	•	
Model 4931	13	5	Sq				•					•				•	•	•	
Model 496	13	5	Sq				•					•				•	•	•	
Model 4951	13	5	Sq				•					•				•	•	•	
Model 4981	13	5	Sq				•					•				•	•	•	
Model 497	13	5	Sq				•					•				•	•	•	
Model 4951-568	13	5	Sq				•					•				•	•	•	
Model 4951-727	12	5	Sq				•					•				•	•	•	
Model 4991	12	5	Sq				•					•				•	•	•	



Surface Mount



Window Mount



Bezel Mount



Edgewise



Switchboard

## Meter Movements

### Taut-band

Taut-band suspension core-magnet construction and wrap-around powdered-iron pole piece provide inherent ruggedness and exceptional self-shielding. Recommended for rugged environments when high shock loads are the norm.

### Pivot & Jewel

Pivot and jewel suspension is a standout for high torque, low internal friction, great accuracy and excellent tracking and repeatability. Recommended for rugged environments when vibration is common.

### Moving Magnet

A moving magnet suspension with a permanent coil and a moving magnet is a much more cost-effective solution than a traditional d'Arsonval movement. With an accuracy level of 5%, it has a price/performance advantage when indication, and not pinpoint accuracy, is the meter's functional requirement.

### AC Meters

AC meters are available in either rectifier type or iron-vane version.

- Rectifier type is the standard taut-band movement for alternating current (AC).
- Iron-vane movements are compact pivot and jewel suspensions. They have the advantage of insensitivity to input distortion, making them the appropriate choice for applications encountering environmental vibration.

*Many options are available for our meters; they are almost infinitely customizable. Please call one of our experienced Applications Specialists or visit our Web site: [www.jewellinstruments.com](http://www.jewellinstruments.com) to view a detailed Specifications Sheet.*

All of Jewell Instruments analog meters meet the ANSI C39.1 standard.

Style

*After form factor and accuracy, style can be the most important decision criteria in selecting a panel meter. Jewell Instruments offers a complete array of customizable features, from cases and covers, to colors and dials, to special markings and hot-stamped covers. Call us and talk to one of our knowledgeable Applications Specialists to discuss your unique style needs.*

### High Style

*New panel meter applications often require a cutting edge look. Jewell Instruments offers a variety of panel meter configurations with clean-cut styling to meet your latest design needs.*



#### S Series — MODUTEC

These clean-cut meters with straightforward design and pleasing aspect ratio are leaders of our panel meter line. Their dimensions and styling will add distinction to any instrument or control panel.

**Surface, rectangle, 1 1/2", 2 1/2", 3 1/2", 4 1/2", 5 1/2", 8", DC 2%, AC rectified 3%, AC iron vane 2%, self-shielding**



#### 2810 Series — MODUTEC

The 2810 Series offers large, easy-to-read scales that are clearly illuminated from ambient light. Featuring a unique case design with enclosed meter movement and scales located behind internal housing, the 2810 offers greater dust resistance than conventional case designs.

**Surface, square, 3 1/2", 4 1/2", DC 2%, AC rectified 3%, AC iron vane 2%, self-shielding**

### Industrial Styling

*Whether it's a new panel meter application or an old standby, the traditional look of our industrialized meters might be just the right design element for your application.*



#### PB Series — MODUTEC

The PB Series meets the design needs of a hard-hitting, big-dial-area "industrial" look demanded by many of our customers. The widest range configurations available in the industry.

**Surface, square, 1 1/2", 2 1/2", 3 1/2", 4 1/2", DC 2%, AC rectified 3%, AC iron vane 2%, self-shielding**

Surface Mount