

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> <li>Chart Recorders</li> <li>Field Strength</li> </ul>

#### Digital panel meter applications include:

#### Digital

- Telecommunications
- Welders
- Agricultural
- Water Purification
- Desalinization

# Key

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

H=Horizontal

Shape

						Sizes								Accuracy					4C Rectified 4C foon lane			
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Model	à	and		/:		, 'r	12/10	الأي م	5.172 n	- 	N io	Ň	2%	3 <sup>6</sup>	<b>b</b> %	\$% \$%	4					
Surface Mount																						
Series	4	1	Rec	•		•	•	•		•		•	•	•			•	•	•	•		
810 Series	4	1	Sq				•	•					•	•			•	•	•	•		
B Series	4	1	Sq	•		•	•	•					•	•			•	•	•	•		
IS Series	5	1	R	•		•	•						•	•			•		•	•		
5 Series 0 Series	5	1	Sq D. Doo						•				•	•			•		•	•		
AS Series	5 6	1	R, Rec Rec	•		•	•		•				•	•			•		•	•		
200 & 300 Series	6	1	R			•	•						•	•			•	•	•	•		
2 Series	6	1	Sq			•	•									•	•		•	•		
73 Series	6	1	R			•										•	•		•	•		
5 Series	6	1	R			•							•						•	•		
Nodel 133 & 135	7	1	Sq	•										•	•		•		•			
lodel 4632 & 4652	7	1	R					•					•	•			•		•	•		
Nodel 3432 & 3452	7	1	R				•						•				•		•	•		
Nodel 443 & 445	7	1	R					•					•	-			•		•	•		
Nodel 35 5 & 56 Series	7 8	1	R Sq			•	•						•	•		•	•		•	•		
M Series	8	1	Med	•		•	•						•	•			•		•			
MAS Series	8	1	Rec	•		•	•									•	•		•			
MS & MSQ Series	8	1	Rec	•		•										•	•		•			
2 & 44 Series	8	1	Sq			•										•	•		•			
Vindow Mount																						
Vorld Meter	9	2	Rec	•		•	•	•					•	•			•		•	•		
/ Series	9	2	Rec	•		•	•	•		•		•	•	•			•	•	•	•		
Bezel Mount																						
WM Series	9	1,2,3	Rec			•	•	•					•	•			•		•	•		
5 Series	9	1,2,3	Sq				•									•	•		•			
000 Series	10	1,3	Sq			•		•		•			•						•	•		
0 Series	10	1,3	Sq	•		•	•		•		•		•	•			•		•			
BA Series	10	3	Rec	•		•	•	•		•			•	•			•	•	•	•		
8 Series	10	3	Rec			•										•			•			
dgewise																						
Series	11	4	H,V		•								•				•		•	•		
ND & ME	11	4	H,V	•	•											•	•		•			
3 & 13F	11	4	H,V		•											•	•		•			
Nodel 12	11	4	H,V	•												20%			•			
02 Series Nodel 111	11	4	H	-										-		•			•			
Nodel 111 Nodel 121	12 12	4	H,V H,V	•	•								•	•			•		•	•		
Nodel 131	12	4	H,V			•							•	•			•		•	•		
Nodel 231	12	4	H,V			•							•	•			•		•	•		
Switchboard																						
830 Series	13	5	Sq					•					•				•		•	•		
lodel 4931	13	5	Sq					•					•				•			•		
Nodel 496	13	5	Sq					•					•					•		•		
Nodel 4951	13	5	Sq					•					•						•	•		
/lodel 4981	13	5	Sq					•					•				•		•	•		
Nodel 497	13	5	Sq					•					•				•		•	•		
/lodel 4951-568 /lodel 4951-727	13	5	Sq					•					>.025%				•		•	•		
Nodel 4951-727 Nodel 4991	12 12	5 5	Sq Sq					•					>.025%	•			•		•	•		
																	-		-	-		



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) to view a detailed Specifications Sheet.

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

Often designing means tradeoffs; size vs. space, accuracy vs. cost. Our complete line of panel meters addresses these issues with many efficient designs — providing economies of space and cost. Talk to one of our Applications Specialists to discuss your space, pricing requirements and solutions we provide — both standard and custom.

#### Space Saving

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RES D.C

Economy

We can incorporate a surface mount panel meter into your design without losing volumetric efficiency. Value — Price and performance are what equals value in today's marketplace. Often a decision based on price alone can lead to unsatisfactory results. We understand that at Jewell Instruments and deliver the best overall value available.

# 55 & 56 Series — MODUTEC

Designed for economy, *Series 55* and *56* meters silhouette movement gives them a flat back, with nothing protruding but the terminals and attachment lugs. An excellent choice when real estate is an issue with low cost as a bonus.

Surface, square, 2 1/2", DC 5%

# MM Series — Jeuell

The *MM Series* panel meter introduced the now ever-popular medallion shape. This space-saving design offers high visibility and rugged durability while blending with today's high technology applications. **Surface, medallion, 1 1/2'', 2 1/2'', 3 1/2'', DC 2%, AC rectified 3%** 

# MAS Series - MODUTEC

Attractive contemporary designs with a low aspect ratio are key benefits of the *MAS Series*. All meters have operating zero adjusters and scales printed on translucent plastic, permitting beautifully diffused lighting, using the optional external light kit or custom light source. **Surface, rectangle, 1 1/2'', 2 1/2'', 3 1/2'', DC 5%, AC rectified 5%** 

# OMS & MSQ Series - MODUTEC

Traditional meters with modern styling and a low price tag. These meters have operating zero adjusters and scales printed on translucent plastic, permitting diffused back-lighting.

Surface, rectangle, 1 1/2", 2 1/2", DC 5%, AC rectified 5%



LIAMPERES

Mulul dilling

# 42 & 44 Series - MODUTEC

A clear plastic cover, with translucent ribbing over the pivot area, gives these meters a clean, open look that is compatible with any surrounding. The case is zinc-plated steel, damage resistant and designed for easy installation.

Surface, square, 2 1/2", DC 5%, AC rectified 5%