

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
- Tension Control
- Marine
- Broadcast Equipment
  Chart Recorders

# Digital panel meter applications include:

#### Digital

- Telecommunications
- Welders
- Agricultural
- Water Purification
- Desalinization

- Volume Units
- Laboratory Equipment
  Kilns
- Test Equipment
- Stereo Equipment Medical
- Field Strength

Speed

Temperature

Battery Level

Key

**Meter Codes** 

Shape

1 = Surface Mount 2 = Window Mount V = Vertical H=Horizontal Med = Medallion

3 = Bezel Mount 4 = Edgewise 5 = Switchboard

Sq = Square R = Round Rec = Rectangle

AC ACHINGO No. No. ACHON 1 # 7/2; S. Z. \$ 1/5 / Sin | 1/5 S. Solo 10 00 M ر د ñ ં Model Surface Mount S Series 4 Rec 1 • . • • • . . • . • . Sq 2810 Series 4 • • • • 1 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 R 1 . . . . . 25 Series 6 R 1 . • . Model 133 & 135 7 1 Sq Model 4632 & 4652 7 R • Model 3432 & 3452 7 R • . . • • Model 443 & 445 7 R 1 • • . . . Model 35 7 R 1 • • • • 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 • Window Mount World Meter 9 2 Rec W Series 9 2 Rec **Bezel Mount** 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 • **Edgewise** 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 н • Model 111 12 4 H.V • . Model 121 12 4 H,V • • . Model 131 12 H,V • 4 Model 231 12 4 H,V • **Switchboard** Sq 2830 Series 5 13 • • Sq Model 4931 13 5 • Model 496 13 5 Sq • Model 4951 13 5 Sq . . . • Sq Model 4981 13 5 • Sq Model 497 13 5 Model 4951-568 13 5 Sq >.025% Model 4951-727 12 5 Sq >.025% • • Model 4991 5 12 Sq • • •

**Sizes** 

Accuracy

# Analog Panel Meters





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.

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