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Jewell Instruments

Panel Meters

World's Best Selection



DECADES OF EXPERIENCE

Leadership For The New Millennium

Jewell Instruments

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***

Jewell Instruments

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Surface Mount, Bezel Mount, Window Mount

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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: 1 1/2"	2"	2 1/2"	3 1/2"	4 1/2"	5"	5 1/2"	6"	8"	Accuracy: 2%	3%	4%	5%	AC Rectified	AC Iron Vane	DC	Self-Shielding
Surface Mount																				
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			•										•	•		•	
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	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			•							•	•			•		•	•
Switchboard																				
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					•					>.025%				•		•	•
Model 4951-727	12	5	Sq					•					>.025%				•		•	•
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) to view a detailed Specifications Sheet.

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

Analog Panel Meters

meters not shown to scale

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.

Surface Mount

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

meters not shown to scale

HS Series — Jewell

The *HS Series* is renowned for its resistance to shock, vibration and moisture. Special parts and fastening reduce the effects of hard usage; one-piece, steel case provides magnetic and electrostatic shielding. The convex glass window is hermetically sealed.

Surface, round, 1 1/2", 2 1/2", 3 1/2", DC 2%, AC rectified 3%, self-shielding



45 Series — Jewell

These panel meters are particularly well suited for industrial applications where style is an issue. Clean lines, easy-to-read dials and rugged, reliable movements all add to the outstanding performance of our most popular industrial meter.

Surface, square, 5", DC 2%, AC rectified 3%, self-shielding



50 Series — Jewell

The *50 Series* has the traditional black case and glass window design of an industrial panel meter. The phenolic Bakelite covers and cases are suited for the harsh treatment industrial equipment receives.

Surface, round, rectangle, 2 1/2", 3 1/2", 5", DC 2%, AC rectified 3%, self-shielding





Surface Mount

Rugged

Many of Jewell Instruments' panel meters deliver rugged performance to overcome the unique demands of heavy industry. Our rugged meters offer a choice of mechanisms to meet the needs of your environment; taut-band for high shock applications or pivot and jewel for high vibration settings. Metal covers and cases add to the "industrial" look of these products while sealing them for protection from invasive hazards such as dust and moisture.



MS Series — Jewell

The *MS series* has a contemporary concave cover to reduce glare and improve readability. Rugged and durable, this aesthetically pleasing rectangular shape interfaces with today's high technology applications.

Surface, rectangle, 1 1/2", 2 1/2", 3 1/2", DC 2%, AC rectified 3%, self-shielding



200 & 300 Series — MODUTEC

The *Series 200/300* are ruggedly designed instruments which meet the demands of heavy industrial environments. These instruments are available with Bakelite cases and glass windows, as well as a wide selection of movements and ranges.

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



72 Series — MODUTEC

These heavy-duty meters are impervious to most solvents that damage plastics. We build them to withstand a long life of rugged service on motor generators, chargers and similar equipment. Available with metal case and cover, wide choice of ranges, all at a low cost.

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



73 Series — MODUTEC

These meters are essentially the same as the *Series 72* and *Series 74*, described above, except they are round. They are renowned for their appearance compatibility with other round gauges on the same panel.

Surface, round, 2 1/2", DC 5%, AC rectified 5%, self-shielding



25 Series — MODUTEC

The *Series 25* process control meters provide reliable performance, high quality and precision indication. They are watertight, shock and vibration resistant.

Surface, round, 2 1/2", DC 2%, self-shielding

meters not shown to scale

Models 133 & 135 — MODUTEC

Models 133 and *135* are renowned for their resistance to shock, vibration and moisture. Special parts and fastening reduce the effects of hard usage; a one-piece steel case provides magnetic and electrostatic shielding and the convex glass window is hermetically sealed. They provide a 90° measuring angle.

133: Surface, square, 1 1/2", AC rectified 4%
135: Surface, square, 1 1/2", DC 3%



Models 4632 & 4652 — MODUTEC

Model 4632 and *Model 4652* are essentially larger round versions of *Models 133* and *135*. The bigger meter provides easier reading. Both meters are self-shielding.

4632: Surface, round, 4 1/2", AC rectified 3%, self-shielding
4652: Surface, round, 4 1/2", DC 2%, self-shielding



Models 3432, 3452 & Models 443, 445 — MODUTEC

Models 3432 and *3452* and *Models 443* and *445* offer the same rugged features as *Models 4632* and *4652* — but they offer a 250° scale. This larger scale allows for more fine tuned read-outs while maintaining the look of an analog meter. Special parts and fastening reduce the effects of hard usage; a one-piece steel case provides magnetic and electrostatic shielding and glass the window is hermetically sealed.

3432: Surface, round, 3 1/2", AC rectified 2%
3452: Surface, round, 3 1/2", DC 2%, self-shielding
443: Surface, round, 4 1/2", AC rectified 2%
445: Surface, round, 4 1/2", DC 2%, self-shielding



Model 35 — MODUTEC

Model 35 is one series of meters where it is not necessary to list the ranges in which it is available. Simply decide which range you require. *Model 35* can be made in any conventional milliammeter, ammeter, or voltmeter range...and in some ranges that aren't very conventional.

Surface, round, 3 1/2", DC 2%, AC rectified 3%, self-shielding



Economy

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

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.

Surface Mount





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 — Jewell

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%



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%

meters not shown to scale

These designs incorporate taut-band/moving-coil movements — unmatched in any production meter, anywhere. Our space-efficient case and dial configuration take up about 30% less space than conventional panel meters.

Window Mount

World Meter — MODUTEC



World Meters incorporate taut-band/moving-coil movements. The result is a rugged and accurate meter with unique and desirable features, at a very economical price.

Window mount, rectangle, 1 1/2", 2 1/2", 3 1/2", 4 1/2", DC 2%, AC rectified 3%, self-shielding

W Series — MODUTEC



The *W Series Meters* — designed for easy installation with meter covers that are flush with the front panel surface. The dial is easy to read with excellent functional appearance; plus, the looks-enhancing edge options include clear, white and black.

Window, 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

Many of our most popular meters are available in multiple mounting styles to offer you the greatest design and performance flexibility. Many models are available in surface, bezel and window mounts. See the Meter matrix on Page 2.

Multi-Mount

SWM Meter — MODUTEC



In a modern combination of meter design and technology, the *SWM Series* incorporates taut-band/moving-coil movement in a small, fully insulated barrel, making the most of behind-panel space. Volumetric efficiency, combined with strikingly handsome styling, result in unparalleled flexibility both for the engineer and designer.

Surface, window, bezel, rectangle, 2 1/2", 3 1/2", 4 1/2", DC 2%, AC rectified 3%, self-shielding

55 Series — MODUTEC



The *55 Series* has a reputation for accuracy and reliability. It features a strong steel case, variety of AC and DC ranges and offers a great value to your design, too.

Surface, window, bezel, square, 3.5", DC 5%, AC rectified 5%

Window/Multi-Mount

meters not shown to scale

Bezel Mount

Jewell Instruments' bezel mount meters enhance appearance and are an affordable way to give your application a custom look. At the same time, the bezels protect the meters from environmental damage. Each bezel installs easily, with all hardware supplied. Bezels are available with many options and special features, such as high temperature case and cover.

Bezel Mount



2000 Series — MODUTEC

2000 Series panel meters are styled to complement the appearance of equipment, rather than dominate it. Dust-sealed case is standard, with moisture resistant sealing available as an option. The electromechanical design achieves the best combination of high torque with minimum response time and minimum power consumption.

Surface or bezel, square, 2 1/2", 4 1/2", 5 1/2", DC 2%, self-shielding



70 Series — Jewell

The highly versatile *70 Series* surface and bezel mount panel meter provides maximum flexibility for size, type of mechanism and method of mounting. It has a small crystal-clear cover which is distortion free and unaffected by aging. The clean, clear appearance of these meters blends with any color scheme.

Surface or bezel, square, 1 1/2", 2 1/2", 3 1/2", 5", 6", DC 2%, AC rectified 3%



BA Series — MODUTEC

These bezels are slender and graceful — protruding less than 1/8" from the panel surface. Molded of an engineered high-strength plastic — the *BA Series* is highly resistant to damage and corrosion, while permitting minimum cross-section consistent with function.

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



58 Series — MODUTEC

Our *58 Series* meters' unique design includes panel front insertion and integral spring clips to hold it in place. These meters have quick-connect terminals as standard for ranges 30 amps and lower, screw terminals optional for all ranges. At and above that, they are induction type meters, with terminals replaced by a charger lead that passes through a formed metal guide — a simple solution to the problem of hooking up heavy-duty leads.

Bezel, rectangle, 2 1/2", DC 5%

meters not shown to scale

Jewell Instruments' edgewise panel meters offer high performance in a minimum of panel space. A one-piece bridge module maintains critical point-to-point dimensions in the pivot-and-jewel movement separate from the magnetic circuit. A shock-absorbing jewel arrangement provides for long operating life.

E Series — MODUTEC



These meters are compact — only 1/2'' thick. The polycarbonate case and cover withstand hard knocks and extreme temperatures. There is a light well provided for optional back-lighting. The *E Series* kit includes spring clips for easy mounting.

Edgewise, horizontal, vertical, 2'' x 1/2'', DC 2%, AC rectified 2%, self-shielding

MD & ME Series — MODUTEC



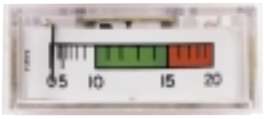


The *MD* and *ME Series* are useful, space-saving meters in three sizes, interchangeable with many costly d'Arsonval meters or moving magnet meters from other sources. All sizes feature flush-to-panel covers without the bulge that disfigures many edgewise meters. A low-cost option provides internal illumination through a translucent dial — sophisticated lighting unusual in any economy meter, let alone an edgewise type.

Edgewise, horizontal, vertical, 1 1/4'', 2'', DC 5%, AC rectified 5%

13 & 13F Series — MODUTEC

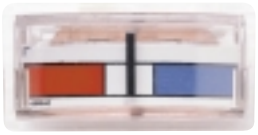




The curved plastic fronts of the *13 Series* make for easy reading without recesses to collect dirt or moisture. Dial faces are completely customizable. Supplied with standard quick-connect type terminals; screw-type 45° offset terminal optional. The *13F Series* features a straight-across front enhancing readability. It hugs the front of the panel, projecting out only 3/16''. The dial recesses slightly behind the cover providing dial illumination by proximity lighting.

Edgewise, horizontal, vertical, 2'', DC 5%, AC rectified 5%

Model 12 — MODUTEC



This compact indicator is perfect as a go/no-go indicator, circuit condition or as a miniature null-type, zero-center tuning indicator of balance in position. In the latter case, its proximate quantitative indication may be additionally useful. It is available with zero left, zero center or zero right indication.

Edgewise, horizontal, vertical, 1 3/8'' x 9/16'', DC 20%

802 Series — MODUTEC



802 Series are very small, low cost, uncalibrated meters for indicating on-off conditions or voltage transition points. They are rugged, dependable and require less than 2 mW to move flag or pointer. The *802* flag type has a white flag that moves from one end of a red & white scale to the other. Optionally, a pointer that moves across scale to indicate circuit condition is available.

Edgewise, horizontal, 5/16'' x 1/4'', DC 5%, (center point only)

Models 111, 121, 131 and 231 incorporate a flat Cormag thin-line movement module whose inherent shielding, reinforced by an external steel cover, permits mounting the meter on magnetic or nonmagnetic panels, without need for adjustment or compensation. It also allows for side-by-side stacking of meters without interaction.

The meters shown below are available in all models listed.









Model 111 — MODUTEC

The *Model 111* has a one-piece scale with a rear access zero corrector. This meter uses minimal space, is stackable without interaction and offers maximum value. Illumination is not available.

Edgewise, horizontal, vertical, 1 3/4", DC 2%, self-shielding

Model 121 — MODUTEC

The *Model 121* is an anti-parallax, in-line scale edgewise panel meter. The zero corrector is conveniently located on the front of the meter. Illumination is optional with 2 5V 200mA lamps.

Edgewise, horizontal, vertical, 2 1/2", DC 2%, AC rectified 3%, self-shielding

Model 131 — MODUTEC

The *Model 131* is a larger version of the *121*. It offers a larger scale for greater viewing ease. Illumination is optional.

Edgewise, horizontal, vertical, 3 1/2", DC 2%, AC rectified 3%, self-shielding

Model 231 — MODUTEC

Model 231 is the largest of our edgewise panel meters — with a 2 3/4" scale. They offer all of the features and options of our smaller versions. Illumination is optional.

Edgewise, horizontal, vertical, 3 1/2", DC 2%, AC rectified 3%, self-shielding

Edgewise

meters not shown to scale

The majority of Jewell Instruments' line of switchboard panel meters offers sealing in accordance with the MIL-M-10304 standard. They are taut-band suspension and are capable of withstanding the navy hi-shock test. The taut-band suspension provides for excellent repeatability by virtually eliminating friction.

The meters shown below are available in all models listed.

2830 Series — MODUTEC

The design of the *2830 Series* makes it the industry standard. With a functional cover/dial design with sharp, bold, high-visibility numerals and legend, they stand apart from the competition. The pointer and scale are on the same plane eliminating parallax reading errors. They provide virtually friction-free operation, greater sensitivity, repeatability without tapping, shock and vibration resistance. Strong steel cases give a classic industrial look that maintains accuracy and prolongs life. Both transducers and signal-conditioning circuitry are integral.

Switchboard, square, 4 1/2", DC 2%, AC rectified 2%, self-shielding

Models 4931, 496, 4951 — MODUTEC

These models are hi-shock, sealed watertight switchboard instruments. The *Model 496* is an AC iron vane type, taut-band suspension meter, while the *4931* is an AC rectifier type. These ruggedized panel meters are appropriate for commercial or military applications. Meets requirements of MIL-M-16034.

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

Model 4981 — MODUTEC

The *Model 4981* watt-meter is qualified to MIL-W-19088, for both transformer and nontransformer ranges. A self-contained package produces a sealed, watertight design.

Switchboard, square, 4 1/2", DC 2%, AC rectified 2%, self-shielding, self-contained

Model 497 — MODUTEC

Synchroscopes measure the difference in phase angle and frequency between the voltages of a running line and an incoming line. These meters are qualified to MIL-I-16104A and have the added benefit of a sealed, watertight design.

Switchboard, square, 4 1/2", DC and AC rectified with an accuracy of +/- 2°, self-shielding, self-contained

Models 4951-568 or 4951-727 — MODUTEC

The *Model 4951* power factor meter meets the requirements of MIL-M-19261 and MIL-M-16034. Available as the *4951-727* self-contained or the *4951-568* "matched set" with external transducer. A watertight seal is a standard feature.

Switchboard, square, 4 1/2", 0.025% @ 0.5 PF, 0.007% @ 1.0 PF, self-shielding

Model 4991 — MODUTEC

The *Model 4991* is an expanded scale switchboard instrument. It meets MIL-M-16125C and MIL-M-23167 requirements.

Switchboard, square, 4 1/2", 3% of frequency span, self-shielding, self-contained









meters not shown to scale

	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)	●				●	●		
10 to 28 VDC (Isolated)	●	●					●	
10 to 30 VDC (Isolated)	●							
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Digital Panel Meters are the appropriate choice for applications where exact measurement, and not relative change, is the required functionality. Jewell Instruments' series of digital panel meters deliver reliability, quality workmanship and competitive pricing for a variety of market applications. Combining unmatched performance with a high degree of dependability, our digital meters are the logical choice for many applications that require exact readings from their instrumentation.

BL Series — MODUTEC

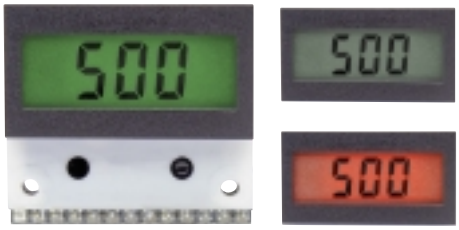
The *BL Series* is a low-cost alternative to your digital panel meter needs. It has a 3.5 digit readout with full 1999 display. The *BL* has low power consumption making it ideal for battery operation — even in backlit applications. LO-BAT indicator available. Decimal point has 3 positions with extended selection.





1000 Series — MODUTEC

The *1000 Series* has everything you need in a digital panel meter application. Options include mounting style, green or red display, backlighting, all with low power consumption, low space requirements and low cost.



meters not shown to scale



PMC Series — MODUTEC

The *PMC Series* is designed to meet the unique needs of process instrumentation applications. It is self-powered from a 4-20mA control loop. It includes our standard features, such as selectable decimal points and large digits.



2000 Series — MODUTEC

The *Series 2000* is the ideal industrial application panel meter. This 1/8" DIN meter is splash and hose proof, with a wide temperature range. The polycarbonate case makes it resistant to knocks. With all of these rugged features, the *Series 2000* remains a slim meter, easy to fit in the design of your industrial application.



2100 Series — MODUTEC

The *Series 2100* is the next generation *2000* with all the features of the *2000*, but now with DIP switch selections for decimal points and inputs. We've also added multiple power options.

meters not shown to scale

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 — Jewell

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.







meters not shown to scale

Jewell Instruments

Jewell Instruments' Customer Focused Business Approach

Cooperation and joint planning between our engineering group and yours drive our customer focused approach. Whether your application calls for a standard unit or custom job, our Applications Specialists develop specifications that ensure the products delivered to you meet or exceed all of your requirements. We work as an extension of your engineering and manufacturing teams to solve problems, improve products, shorten lead times and bring more value to your products and services. These are the cornerstones of our long-term customer relationships.

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