5 Honeywell

Hour Meters

PANEL METERS

TEST & MEASUREMENTS

PASSIVE & ACTIVE **OPTOELECTRONICS**

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5

Quartz Plus Hour Meters — 85000 Series



GUARTZ 00000-1 HOURS

Honeywell's 85000 Series Quartz Plus meters are direct current hour meters that provide legendary performance and reliability in a technically advanced quartz package. The Quartz Plus features a rugged drive mechanism inside a shock-proof, tamperproof, totally sealed case. UL Recognized and CSA Certified Running Indicator 3 mm (0.12') Numeral Height Transient Voltage and Reverse Polarity Protected Standard Terminals: '/4" Male Blade

- Custom CMOS Integrated Circuit

LCD Hour Meters — LM Series









Round

Diamond



Honeywell's MCU (microcontroller unit) LCD (liquid crystal display) Hour Meters, LM Series, are sealed digital instruments designed to monitor and record elapsed running time, normally displayed in hours and tenths of hours. These devices are used to log running time of equipment used in transportation applications to assure proper maintenance of expensive machines or systems. This maintenance typically involves replacing, changing, or checking parts, belts, filters, oil, and lubrication of heavy duty equipment, or running condition of engines, motors, and blowers, to name a few. These devices feature a 40-year memory data retention (without power) to provide customers with a long data retention capability within their desired application. The large 7 mm display eases readability and offers backlight options and a running indicator. Sealing to IP67 provides enhanced durability. The hour meter also features a long reset time to offer customers the protection against malfunction of reset. The LM Series offers customization options including the customer's logo, Honeywell logo, or a black face, as well as numerous customizable our dotions. a black face, as well as numerous customizable port options.

All meters below have 1 /4-inch blade terminals and are marked with the Honeywell logo — for 3 /16-inch terminals and custom logos, please contact your local Allied sales office.

- Backlight and Large 7 mm Display Ease Readability
 Digital, Microcontroller Unit LCD
 Durable Design of Mounting Assembly
 IP67 Environmental Sealing Provides Enhanced Durability
 Customizable with Customer's Logo, as Well as Numerous Customizable Port Options
 Function Types, Including Hour Meter (Measures Time) or Counter (Measures Number of Instances, Starts, etc.)
 Fast Delivery of Samples and Products Due to Honeywell's Integrated Supply Chain and Global Design Center
 Shock and Vibration Resistance Allow for Use in a Wide Variety of Tough Applications
 UL/CE Approvals
 9 to 64 Volt Range

	9-				
Stock No.			Shape Connector Definition		EACH
70378422 70378423 70378424 70378425 70378426 70378427	LM-HB4AS-H11 LM-HS2AS-H11 LM-HB2AS-H31 LM-HH2AS-H21 LM-HH4AS-H21 LM-HS4AS-H11	Round Diamond Round Diamond Diamond Standard	Positive/Negative/Reset/Enable Positive/Negative Positive/Negative Positive/Negative/Reset/Enable Positive/Negative/Reset/Enable	Black Black Black Black Black	24.43 24.00 24.00 26.68 27.14 24.43 24.43
70378427 70378428	LM-HS4AS-H11 LM-HB4AS-H31	Standard Round	Positive/Negative/Reset/Enable Positive/Negative/Reset/Enable	Black	

Fig. A Fig. B Fig. C

- Totally Sealed Case
 Temperature Range: -40°F to +185°F
 (-40°C to +85°C)
 Shock and Vibration Resistant
- **Direct Current Hour Meters**
- Voltage Range Electrical Termination Stock Description EACH 1/4" Blade 34.57 30.80 52.04 45.79 30.13 47.11 37.53 33.13 70111629 70111605 85000-12 85094-12 2-Screw Mount 2-Screw Mount 6.5-16 VDC 10.0-80 VDC 10.0-80 VDC 10.0-80 VDC 10.0-80 VDC 10.0-80 VDC 70111606 85331-12 2-Screw Mount 85331-12 85127-12 85097-02 85093-03 85098-03 85342-03 2-Screw Mount 2-Screw Mount, 100K Hours 3-Screw Mount Round (2.27" Black Bezel) Round (2.50" Chrome Bezel) Round (2.27" Chrome Bezel) 70111630 70111607 70111608

AC Hour Meters — 20000 Series







Fig. B



Honeywell's 20000 Series AC hour meters provide an accurate means of tracking run time on all types of equipment, whether for testing purposes, leasing applications, maintenance records or warranty programs. The synchronous motor is integrated into the chassis as one substructure for maximum reliability, and the complete unit is installed in a totally sealed case.

- Single-Phase Synchronous, Permanently-Lubricated
- Temperature Range: -65°F to +154°F (-54°C to +68°C)
- Shock and Vibration Resistant UL Recognized, CSA Certified, CE Mark 3.0 Watts Power Rating 3 mm (0.12") Numeral Height

Stock No.	Mfr.'s Type	Fig.	Description	Voltage Range	Freq. (Hz)	Electrical Termination	EACH
70111631	20001-17	A	2-Screw Mount	108-132 VAC	60	8-32	30.20
70111610	20007-17	A	2-Screw Mount	216-264 VAC	60	8-32	27.42
70111602	20028-17	Α	2-Screw Mount	108-132 VAC	50	8-32	45.70
70111519	20035-17	Α	2-Screw Mount	108-132 VAC	60	Wire Lead	28.63
70111603	20017-14	В	3-Screw Mount	108-132 VAC	60	8-32	28.34
70111604	20019-14	В	3-Screw Mount	216-264 VAC	60	8-32	37.29
70111611	20116-23	C	Retainer Mount	108-132 VAC	60	8-32	25.60
70111612	20177-23	С	Retainer Mount	216-264 VAC	60	8-32	49.49
70111613	20182-23	С	Retainer Mount	108-132 VAC	60	1/4" Blade	32.71

Diochron Hour Meters









- Quartz Accuracy: ±0.02% (±200 ppm) Sealed, Shock-Resistant Case Run Indicator Voltage Range: 10-80 VDC Temperature Range: -40°F to +185°F



Diochron X 00000 1

- Numeral Size: 0.12" UL Recognized CSA Certified
- Polycarbonate Case and Lens 1/4" Blade Terminals

Stock No.	Mfr.'s Type	Fig.	Description	Voltage Range	EACH
70111535	82450-83	A	2-Screw	10-80 VDC	27.32
70111536	82451-84	B	Retainer, Round Black Bezel	10-80 VDC	28.91
70111537	82452-82	C	Retainer, Rectangular Bezel	10-80 VDC	25.19
70111538	82453-85	D	3-Screw	10-80 VDC	25.19

474 PANEL METERS

1.800.433.5700