

DMWH300

Monitors Accumulated Energy & Demand

Accumulated Energy & Demand Monitor

DM
SERIES

Key Features

- Single Phase And/Or Three Phase Metering
- Revenue Accurate Readings Of Bi-Directional Energy, Power & Demand
- Easily Programmed for Any CT or PT Ratio
- RS232 and RS485 Communications Available
- Nonvolatile Memory — No Battery Needed
- 7 Digit Display — No Multiplying Factor
- Rugged Utility Grade Design
- Superbright LED Option for Direct Sunlight Applications

**Measures Watts
Watt-Hours &
Watt Demand**



Description

The DMWH 300 is a highly accurate, low cost, bi-directional energy demand meter. This utility grade, microprocessor-based unit monitors kilowatts, kilowatt-hours and kilowatt demand in utility, industrial and commercial applications. When energy demand rises above expectations, the DMWH 300's control outputs trigger to shed load or alarm.

Programmable Settings

DMWH 300 monitors can be programmed to handle any CT or PT ratio. Their programming and reset features are password protected.

Nonvolatile Memory

A nonvolatile serial EEPROM safely stores the unit's readings when it is powered down. There's no need for a battery.

Analog Outputs

The unit offers a 0-1mA or 4-20mA analog output for wattage readings. A Form C KYZ pulse is also available for watt-hour readings.

Digital Communication

Both RS232 and RS485 communications are available. The unit uses an ASCII-based protocol.

Alarm Limits & Relay Outputs

The DMWH 300 offers set points and Form C dry contact relays for over and under wattage, both positive and negative.

Utility Grade Construction

With a rugged, utility-grade design, the DMWH 300 is built to run flawlessly for

years. The device also exceeds all IEEE C37.90.1 surge withstanding standards.

Superbright Display

This unit is available in standard brightness for indoor applications or superbright for viewing in direct sunlight.

Product Applications

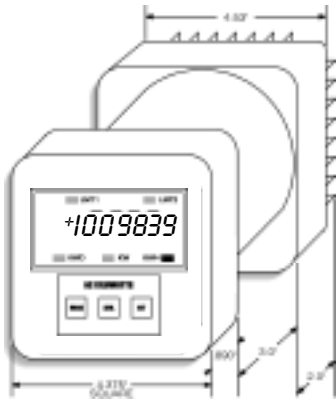
- Sub-Metering Energy Usage
- Cost Allocation Applications
- Commercial Facilities
- Utility Substations
- Power Generation Applications

Revenue Accurate to
Utility Metering
Standards

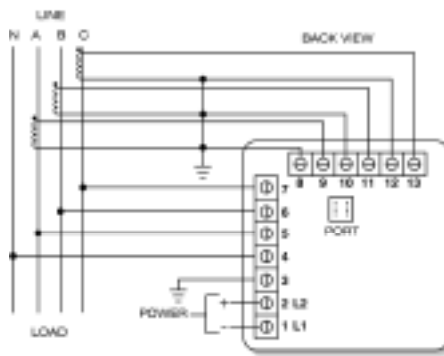
 **Electro Industries/GaugeTech**
The Leader in Web Accessed Power Monitoring



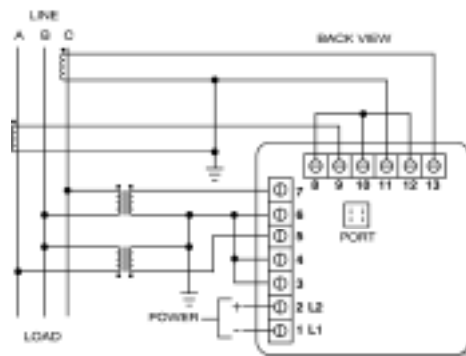
Dimensions & Typical Wiring Information



3-PHASE, 4-WIRE WYEs with DIRECT VOLTAGE AND CTs



3-PHASE OPEN DELTA



Note: Download manual from www.electroind.com to get additional wiring configurations.

INPUT VOLTAGE RANGE

- 150V Phase to Neutral (also used with PTs for extended input range)
- 300V Phase to Neutral, Up to 600V Phase to Phase (Option G)

INPUT CURRENT RANGE

- 10A Maximum

BURDEN

- Voltage: 0-1VA Maximum
- Current: 0.1VA Maximum

COMMUNICATION FORMAT

- 1 Start Bit, 8 Data Bits, 1 Stop Bit
- Programmable from 1200 to 4800 Baud

ACCURACY

- 0.4%, +1- Digit Resolution
- Instantaneous: 4 Digits
- Total Energy: 6 Digits
- Meets ANSIC-12 1995

INPUT WITHSTANDING

- Voltage and Current: Continuous 200% Rated
- Surge: 10x Rated Per 3 Seconds
- Surge Withstanding: Per IEEE C37.90.1

SENSING METHOD

- True RMS

FREQUENCY RANGE

- Fundamental 45-75Hz

CONTROL POWER

- 115V AC $\pm 20\%$, 6VA 47-400Hz (Option 115A)
- 230VAC $\pm 20\%$, 6VA 47-400Hz (Option 230A)
- 24-48V DC $\pm 20\%$ 6VA (Option D)
- 125V AC or DC $\pm 20\%$, 6VA universal (Option D2)

OPERATING TEMPERATURE

- 20°C to +70°C

I/O ISOLATION

- 2500V AC, 60Hz (minimum isolation between any input and output)

UPDATE TIME

- 1 Second

Ordering Information

Model	Connection	Power Labeling	Operating Voltage	Control Power	Relay/Pulse Option	Display Brightness
Option Numbers: Specify a unit by writing its option numbers below. See sample. Specify your CT and PT ratio, Delta or Wye System. If a specification is given, it will be preprogrammed in the factory.						
DMWH 300	3E	KW	120	115A	NL	BRT
DMWH 300	3E 3 Element Wye System	KW Kilowatts	120 120/208	115A 120VAC	NL 2 Relays and 1 KYZ Pulse	BRT Super Bright for Direct Sunlight
	2.5E 2.5 Element Wye System	MW Megawatts	G 277/480	230A 230VAC $\pm 20\%$		
	2E 2 Element Delta System			D 24-48VDC		
				D2 125VAC or DC		

Accessories

K110	SF232DB	SF485DB	SDFI-1 or SDFI-20
<i>Mounting Kit</i>	<i>RS232 Communication Adapter</i>	<i>RS485 Multi-Drop, Daisy Chain Communication Adapter</i>	<i>2 Channel Analog Outputs</i>
Remote terminal block mounting kit with 36" cable and mounting bracket.	Limited to a distance of 50 feet between the central computer and the DMWH 300.	The maximum distance is 4000 feet between the computer and DMWH 300.	SDFI-1 provides 0-1mA output. SDFI-20 provides 4-20mA output. Outputs can be mapped to any reading. Both channels are bi-directional.

Unicom 2500-F

Interface Converter

RS485 to RS232 to Fiber Converter.



Electro Industries/GaugeTech

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