

DT Series

Switchboard Meter/Relay/Transducer

A Monitor with Advanced Output Capabilities

Choice of Measurements

- AC Voltage
- AC Amperage
- DC Voltage
- DC Amperage
- Transducer Inputs (Wattage, VARs, etc.)
- Process Signals (Pressure, Temperature, etc.)

Metering Features

- Highly Accurate 12-Bit Resolution
- 4-Digit Readout
- Maximum/Minimum Readings
- Programmable Settings
- .8" Super-Large, High-Output LEDs
- Directly Replaces ANSI C39.1 Analog Meters

Output Features

- Programmable High and Low Set Points
- 2 Dry-Contact Relay Outputs
- 0-1 or 4-20mA Outputs
- RS232 or RS485 Outputs

Description

The DT Series digital switchboard monitor is a highly accurate measuring instrument with advanced output capabilities. With true 12-bit A/D capability, the monitor offers superior accuracy and resolution. Super-large LED displays can be read from up to 300 feet away!

Directly Replaces Analog Meters

A DT monitor fits a standard ANSI cutout. Use it to quickly and easily replace existing analog switchboard meters.

Rugged, Industrial Design

These units possess the highest quality LED displays, heavy-duty metal enclosures, and electrically protected power supplies and signal inputs. They will operate reliably for many years.


Output Capabilities

Relay Outputs: Two relay outputs can be activated for above and below programmable set points. The unit offers programmable time delays when the relays activate. Use this feature for set-point control in any typical meter/relay application.

Transducer Output: DT monitors can retransmit a 0-1 or 4-20mA signal (proportional to the readings), which allows them to replace analog transducers. This signal can then be brought into anything that accepts an analog input, such as SCADA, an EMS system, or a PLC.

Digital Communications: Both RS232 and RS485 outputs are available. The meter uses an open ASCII-based protocol.



DT Series

Specifications

<p>Accuracy DC Volts and Amps: 0.05% of full scale, ±1 digit AC Volts and Amps: 0.2% of full scale, ±1 digit Resolution: 4 digits to 9999 counts</p> <p>Frequency Range 45-1000Hz</p> <p>Operating Temperature -20 to +70°C</p>	<p>Control Power Requirements 115V AC, ±20%; 6VA, 47-440Hz (Suffix 115A) 230V AC, ±20%; 6VA, 47-440Hz (Suffix 230A) 24V DC, ±20%; 6VA (Suffix D) * 48V DC, ±20%; 6VA (Suffix D1) * 125V AC/DC, ±20%; 6VA (Suffix D2) *</p> <p>Burden Voltage: 0.1VA maximum Current: 0.1VA maximum</p>	<p>Update Time 600ms</p> <p>Construction Rugged metal casing with standard ANSI C39.1 cutout</p> <p>Surge Withstanding Continuous 200% of maximum rated value, per IEEE C37.90.1 and ANSI C62.41 Surge 10x rated per 3 seconds</p>	<p>Max/Min Averaging Time 1 to 9999 seconds, programmable</p> <p>Relay/Output Delay Time 1 to 9999 seconds, programmable</p> <p>Harmonic Filter Option Low-pass band filter on input for metering and output based on fundamental frequency. Used for tripping when harmonics are present (Suffix POW).</p>
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Models

VOLTS		
AC MODEL	DC MODEL	FULL-SCALE RANGE
DTVA10	DTVD10	9.999V
DTVA100	DTVD100	99.99V
DTVA600	DTVD600	600.0V

AMPS		
AC MODEL	DC MODEL	FULL-SCALE RANGE
DTAA10	DTAD10	9.999A
DTAA20	DTAD20	25.00A

POTENTIAL TRANSFORMER MONITOR		
MODEL	MAXIMUM INPUT	FULL-SCALE RANGE
DTVA120	300V	Programmable

(Use with 120V PTs. Specify Scaling)

CURRENT TRANSFORMER MONITOR		
MODEL	MAXIMUM INPUT	FULL-SCALE RANGE
DTAA5	10A	Programmable

(Use with 5A CTs. Specify Scaling)

DC SHUNT READOUT		
MODEL	MAXIMUM INPUT	FULL-SCALE RANGE
DTAD50	100mV	Programmable
DTAD100	200mV	Programmable

(Use with 50 and 100mV shunts)

TRANSDUCER READOUT		
MODEL	MAXIMUM INPUT	FULL-SCALE RANGE
DTT1	2mA	Programmable
DTT20	40mA	Programmable

(Use with 0-1 and 4-20mA transducers)

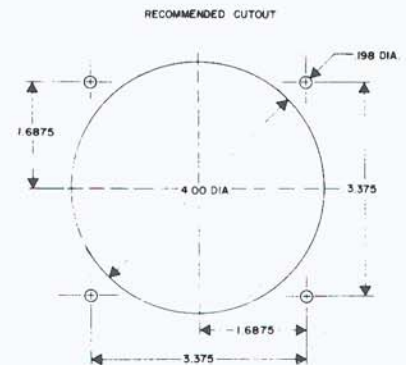
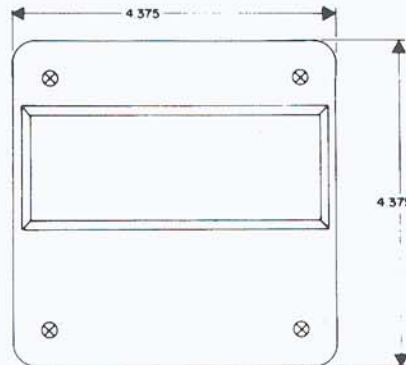
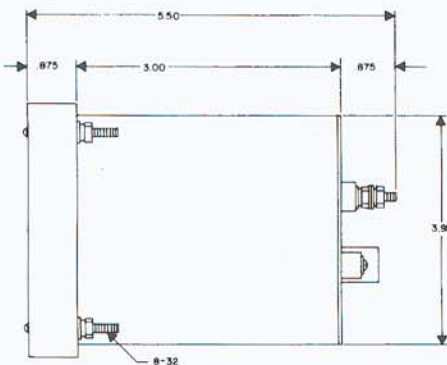
Ordering Info

Options

- Analog Transducer Output (0-1mA): Suffix NI. *
- Analog Transducer Output (4-20mA): Suffix NI20. *
- COM Port (RS232): Suffix NT.
- COM Port (RS485): Suffix NS.
- Harmonic Filter (low-pass filter on inputs for fundamental readings and output tripping): Suffix POW. *
- Set-Point Output Relays: Suffix NL.
- True RMS Readings (for AC models): Suffix RMS.

*Not available with DT Series Meters

Dimensions



Ordering Information

To place an order, please specify meter type (e.g., DTVA120), control power and options (e.g., D-RMS), and scaling (e.g., 2400V AC). (Using the examples, your order would be: DTVA120-D-RMS-2400 AC Volts.) Please consult Electro Industries/GaugeTech for custom inputs and special configurations.

*NOTE: DT Series only available with 120VAC Power Supply