

DT-5TG Advanced Panel Meter

The DT-5TG Advanced Panel Meter with additional features when combined with a compatible in-line sensor monitors speed and process time. Loaded with features, the DT-5TG Advanced Panel Meter is extremely versatile with selectable inputs. The DT-5TG is fully scalable and possesses three selectable modes allowing it to measure and display RPM/linear speed/rate, elapsed time and process time. Each panel meter accepts a variety of signal inputs from any sensor providing an NPN, contact, sine wave, or square wave such as pulse generators, proximity sensors, photoelectric sensors, magnetic sensors and NPN OC transistors. Similar to the popular DT-5TS Series Panel Indicator, the DT-5TG adds the features of Hold, Peak, Average Max. & Min. as well as programmable Hi/Lo/Go set point indicator warnings.



Typical applications can range from machine operation timing, rate of change monitoring such as on a conveyor, elapsed time of oven curing etc. with any variety of compatible sensor inputs desired.

Features

- *Highly accurate ($\pm 0.008\% \pm 1$ digit) makes ideal for process control and analysis*
- *Large 5 digit blue LED display allow easy viewing from greater distances*
- *Scalable programming gives user the flexibility to set up and monitor virtually any process*
- *Selectable update time allows operator to speed up/slow down display changes to facilitate process*
- *Wide range power voltage (85 - 264VAC, 50/60Hz) eliminates need for having to purchase and wire an additional power transformer*
- *Great versatility with multiple sensor input capability in one unit: NPN open collector, contact and square or sine wave sensor inputs*
- *IP66 front cover protection keeps water out, enables usage in compatible plant wash-down operations*
- *DC power source output to power compatible sensors saves money by eliminating need for separate power supply*
- *Selectable decimal point enables higher resolution display potential*
- *Peak, Average Maximum, Average Minimum and Hold Functionality*
- *Programmable Hi, Lo set points with Hi/Lo/Go LED indication*
- *1/8 DIN size panel cut out permits easy, industry-standard mounting*

DT-5TG Specifications

Measuring Range	10 - 99,999 rpm (at 1 p/r), 0.2 - 30,000 rpm (at 60 p/r)
Display Range	0.0000 - 9.9999, 0.000 - 99.999, 0.00 - 999.99, 0.0 - 9999.9, 0 - 99999
Accuracy	± 0.008 % ± 1 digit
Display Update Time	0.25, 0.5, 1, 2, 4, 8, and 16 seconds (selectable)
Display	5 digit 0.56" (14.2 mm) high LED
Input No. of P/R	1 to 9,999 (programmable)
Input Signal Characteristics	Sine wave. max. frequency 10 kHz / Square wave. max. frequency 30 kHz / Contact closure. max. frequency 20 Hz / Open collector with 20 µsec minimum
Input Signal Amplitude	Sine wave (0.3 - 30 VP-P depending on frequency) / Square wave 5 digits, 0.3" (8 mm) high, LED LO: 0 - 1.5 V, HI: 4 - 30 V
Input Impedance	10 KΩ for magnetic pickup, rotary encoder and proximity switch only
Sensor Power Supply	12 VDC ± 5 % (50 mA max.)
Power Requirement	85 - 264 VAC (50/60 Hz) or Optional (9 - 35 VDC at 1 W also available)
Power Consumption	1 W (5 W when optional modules are used)
Ambient Temperature	32 - 113°F (0 - 45°C)
Product Weight	0.55 lb (250 g)
Package Weight	0.65 lb (295 g)
Dimensions	3.46 x 3.78 x 1.89" (88 x 96 x 48 mm)
Warranty	1 year
Included Accessories	Spade wiring connectors

Ordering Details

DT-5TG	Advanced Panel Meter with selectable inputs, 100-240 VAC Power
DT-5TG-DC	Advanced Panel Meter with selectable inputs, 9-35 VDC Power

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Accessories

Proximity Sensors	BI2-S12	NPN (NO) sinking output 1.5 kHz frequency, LED indication, 6.5' (2 m) cable, 0.08" (2 mm) sensing distance, NEMA 6 (IP67) rating
	DJ2-G	NAMUR output, 3 kHz frequency, zero-sensing capability, 6.5' (2 m) cable, 0.08" (2mm) sensing distance, NEMA 6 (IP67) rating
	MCS-3109	NPN (NO,NC) output, 300 Hz frequency, 0.32" (8 mm) sensing distance, 6.5' (2 m) cable, NEMA 6 (IP67) rating, for use in high vibration areas
	SE-G	Square wave output, 8 kHz frequency, LED indication, 18" (0.46 m) cable, 0.04" (1 mm) sensing distance,
Retro-Reflective Photo Sensors	MCS-625	Photo sensor with NPN sinking output, 250 Hz activating frequency, 10' (3 m) cable 1" to 3' (25 to 914 mm) operating range
	MCS-655	Photo sensor with NPN sinking output, 333 Hz activating frequency, LED status, 10' (3 m) cable, NEMA 4 (IP65), 1" to 3' (25 to 914 mm) operating range for light or dark activation.
	LS-S50MLR	Laser sensor with NPN/PNP (NO,NC) outputs, 1.5 kHz frequency, LED indication, 6' (1.8 m) with quick disconnect connection, NEMA 6 (IP67) rating
Rotary Pulse Generators	RE1B-60C	Single logic output (Logic "1" ...supply voltage minus 2.5V or more, 10mA (max) / Logic "0" ... less the 0.4V, 30mA max.), 60 pulses/rev., 5000 rpm max., 10' (3 m) cable
	RE1B-600C	Single logic output (Logic "1" ...supply voltage minus 2.5V or more, 10mA (max) / Logic "0" ... less the 0.4V, 30mA max.), 600 pulses/rev., 3000 rpm max., 10' (3 m) cable
	RE1B-1000C	Single logic output (Logic "1" ...supply voltage minus 2.5V or more, 10mA (max) / Logic "0" ... less the 0.4V, 30mA max.), 1000 pulses/rev., 1800 rpm max., 10' (3 m) cable
	RE2B-30C	Dual logic output (90° out of phase) for quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 30 pulses/rev., 5000 rpm max., 1.6' (.49 m) cable.
	RE2B-60C	Dual logic output (90° out of phase) for quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 60 pulses/rev., 5000 rpm max., 1.6' (.49 m) cable.
	RE2B-600C	Dual logic output (90° out of phase) for quadrature applications. Same logic as the RE1B Series. A zero position output for shaft position reference. 600 pulses/rev., 3000 rpm max., 1.6' (.49 m) cable.
	FPM-RE1B	12" circumference wheel for use with RE1B and RE2B pulse generators
Magnetic Pick-up Sensors	MP-10	Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10' (3 m) cable
	3030AN	Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, Amphenol connector
	CABLE-3030	Optional cable for 3030AN
	3070-XP12010	Sine wave output from change in magnetic to non-magnetic, change in voltage proportional to magnetic flux intensity over time, range of 0.01" (0.25 mm) typical clearance, 10' (3 m) cable Stainless steel housing, explosion-proof ATEX approved: II 2 GExm II T3
Slot Type Sensor	CM-SR21	For less dense materials that allows beam to penetrate through, NPN or PNP output with a 0.08" (2 mm) gap range, NEMA 4x (IP65) housing.
	CBL-75ANL	Optional cable for CM-SR21 16.4' (5 m)