

DT-5TXR Panel Meter with Optional Output Modules

The DT-5TXR Panel Meter with Optional Output Modules is an economical unit for speed and process time monitoring when combined with a compatible in-line sensor. Loaded with features found in more expensive units, the DT-5TXR Panel Meter is extremely versatile with selectable inputs. The DT-5TXR is fully scalable and possesses three selectable modes allowing it to measure 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. Typical applications can range from machining 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. The DT-5TXR panel meter also accepts various output modules, enabling it to output data for analysis, record keeping or assist in controlling the process through a separate control device. Up to two modules can be accepted simultaneously, offering an enormous number of combinations and options.



DT-5TXR

LED Display without front cover protector

Features

- Accepts up to two output modules allowing voltage, current, BCD, NPN & relay output combinations for control or remote process monitoring
- Highly accurate ($\pm 0.008\% \pm 1$ digit) makes ideal for process control and analysis
- Large 6 digit LED display plus two smaller 6 digit secondary displays 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 power range (85 - 264VAC, 50/60Hz) eliminates need for having to purchase and wire an additional power transformer. Low voltage models available
- Great versatility with multiple sensor input capability in one unit: NPN open collector, contact and square or sine wave sensor inputs
- Front cover protection eliminates accidental bumping of keypad to incorrect program
- 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 1/8 DIN size panel cut out permits easy, industry-standard mounting

DT-5TXR Specifications

| | |
|-------------------------------------|---|
| Measuring Range | 10 - 99,999 rpm (at 1 p/r), 0.2 - 30,000 rpm (at 60 p/r) |
| Display Range | Tachometer/Rate Meter: 0 - 999999 with selectable decimal point. Elapsed Time: 0:00:00 - 9:59:59 or 0.00- 999.99 sec. Process Time: 0:00:00 - 0:59:59 or 0.00 - 999.99 sec |
| Scalable | Yes (with outputs, see modules) |
| Accuracy | Tachometer/Rate Meter & Elapsed Time: $\pm 0.008\% \pm 1$ digit Process Time: $\pm 0.008\% \pm 1$ digit |
| Display Update Time | 0.2, 0.5, 1, 2, 5, 10, 15, 30, 60 sec. |
| Input No. of P/R | 1 to 9,999 (programmable) |
| Input Signal Characteristics | NPN open collector input: max. fre- quency 100 kHz / Contact input: max. frequency 20 Hz / Square wave input: max. frequency 30 kHz - Sine wave input (magnetic pickup): max. frequency 10 kHz |
| Sensor Power Supply | 12 VDC (150 mA) |
| Power Requirement | 85 - 264 VAC (50/60 Hz) Optional (9 - 35 VDC at 1 W also available) |
| Ambient Temperature | 32 - 113°F (0 - 45°C) |
| Product Weight | 0.66 lb (300 g) |
| Package Weight | 0.95 lb (430 g) |
| Dimensions | 5.27 x 3.78x 1.89" (134 x 96 x 48 mm) |
| Warranty | 2-Year |
| Included Accessories | Mounting adapters & screws, decal sheet |

| | |
|-------------------|--|
| DT-5TXR | Panel Meter with Output Module Capability, Selectable inputs, 100-240 VAC Power |
| DT-5TXR-DC | Panel Meter with Output Module Capability, Selectable inputs, 9-35 VDC Power |
| DOP-BCD | BCD output module, 36 Pin Connection |
| DOP-CPTR | Relay output module, terminal block connection |
| DOP-FVC | Analog output module (4-20mA & 0-1, 0-10, 1-5 VDC), 36-pin connection |
| DOP-FVTR | Analog output module (4-20mA & 0-1, 0-10, 1-5 VDC), terminal block connection |
| DOP-RMTR | Ratio input module, terminal block connection |
| DOP-TRTR | NPN open collector output module, terminal block connection |

Note: For Factory Assembled Panel Meter with Output Modules, Add Module to end of DT-5TXR Part and remove DOP. For two modules, only 1 36-Pin Module and 1 Terminal Block connection module can combine. Example: DT-5TXR-CPTR-FVC Panel Meter, 100-240VAC Power with Relay Output Terminal Module & 36-Pin Analog Output Module

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-60F | Rotary encoder in ABS housing with 60 ppr digital output, maximum speed 5000 rpm, 1.7 ft (0.5 m) cable |
| | RE1B-600F | Rotary encoder in ABS housing with 600 ppr digital output, maximum speed 5000 rpm, 1.7 ft (0.5 m) cable |
| | RE1B-1000F | Rotary encoder in ABS housing with 1000 ppr digital output, maximum speed 5000 rpm, 1.7 ft (0.5 m) cable |
| | RE2B-30F | Quadrature rotary encoder in ABS housing with Dual (90° out of phase) 30 ppr digital output, maximum speed: 5000 rpm, 1.7 ft (0.5 m) cable |
| | RE2B-600F | Quadrature rotary encoder in ABS housing with Dual (90° out of phase) 600 ppr digital output, maximum speed: 5000 rpm, 1.7 ft (0.5 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) |