

Data Logging TENSION METERS

DTMX

8 Tension Ranges

0.1–200.0 g up to 2.00–20.00 Kg

The new CHECK•LINE DTMX Digital Tension Meter offers a wealth of advanced features, including built-in data logging with statistics and the ability to download data to printers, computers and recorders.

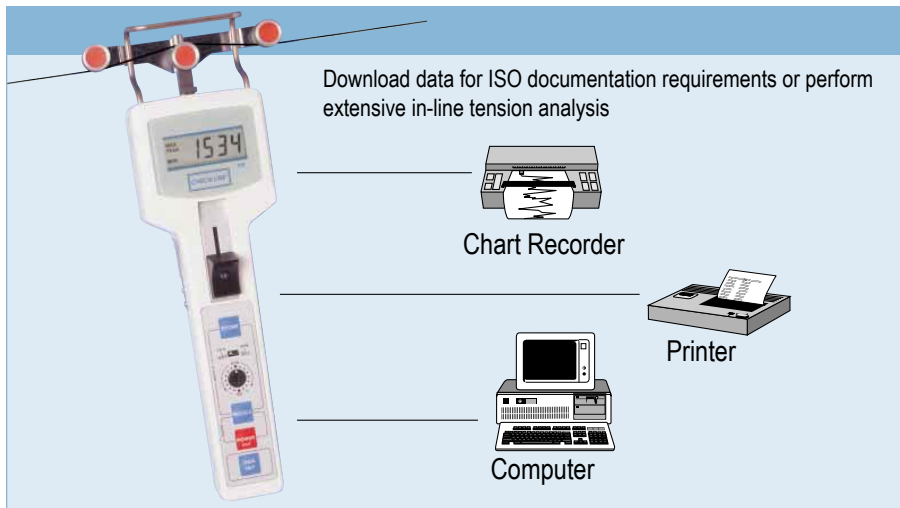
Its rugged, die-cast aluminum housing and surface-mount electronics make it especially resistant to damage, even in the toughest production environments.

FEATURES

- Built-in memory for 100 data points plus statistics
- Automatic calculation and display of *maximum, minimum, average, peak & standard deviation* values
- Downloading of all data & statistics to printers, computers or recorders using serial and analog outputs
- Calibration is available in grams or pounds
- Tensions are sampled at 62.5 times/sec & averaged over a user-selected interval of 0.5, 1, 2 or 4 seconds
- Thickness Compensator, Rigidity Selector and Field Adjustment permit fine tuning of the calibration for the highest accuracy on different process materials
- Built-in mounting holes permit fixed installation for *continuous* in-line use
- Hard-coated, V-grooved aluminum rollers rated for speeds up to 2000 m/min or, optionally, up to 5000 m/min
- Powered by 4 AA batteries
- Optional NIST Calibration Certification



DTMX



Optional P-40 Printer



The P-40 is a portable, rechargeable battery powered printer. It includes an interface cable for the DTMX plus a 115 V AC battery charger. (A 230 V AC charger is optionally available.)

| STATISTICS | |
|------------|-------|
| UNITS | g |
| DATA | 12 |
| MAX | 154.2 |
| MIN | 101.5 |
| PEAK | 157.5 |
| AVG | 137.7 |
| DEV | 13.77 |
| DATA | |
| 1 | 101.5 |
| 2 | 120.7 |
| 3 | 140.7 |
| 4 | 133.9 |
| 5 | 135.2 |
| 6 | 136.8 |
| 7 | 140.5 |
| 8 | 146.4 |
| 9 | 147.4 |
| 10 | 146.4 |
| 11 | 148.6 |
| 12 | 154.2 |
| ** END ** | |

Model Data

| Model | DTMX-200 | DTMX-500 | DTMX-1K | DTMX-2K | DTMX- 2.5KB | DTMX-5KB | DTMX-10KB | DTMX-20KB |
|-----------------------------|------------------|------------|------------------|----------|-------------|------------|-----------------|----------------|
| Tension Range (grams) | 0.1–200.0 | 0.1– 500.0 | 50–1000 | 200–2000 | 250 – 2500 | 500 – 5000 | 1.00 – 10.00 Kg | 2.00 –20.00 Kg |
| Accuracy | ± 1.0% or better | | ± 1.5% or better | | | | | |
| Outer Roller Distance (c:c) | 38 mm | 38 mm | 38 mm | 38 mm | 100 mm | 100 mm | 100 mm | 200 mm |

Specifications

| | | | |
|-------------------------------------|---|---------------------------------------|---|
| Measuring Principle | Strain gauge | Analog Output | 0–1 VDC, proportional to tension range |
| Measuring Frequency | 16 msec (62.5 samples/sec) | Frequency Response (Analog Output) | 16 msec (62.5 Hz) |
| Deflection of Sensing Roller (max.) | 0.2 mm | Battery Type | Four (4) 1.5 V AA (included) |
| Overload Capacity | 200% of Full Scale | Battery Life | 20 hours, continuous use |
| Temperature Coefficient | Zero: less than ± 0.3% FS/ °C Span: less than ± 0.01% FS/ °C | AC Adaptor (optional) | 6 V DC @ 200 mA, for continuous in-line use |
| Display | 4-Digit LCD, 12 mm high | Auto Power Off | After 2 minutes of non-use |
| Display Update Rate | 0.5, 1.0, 2.0 or 4.0 seconds, dip-switch selectable | Roller Material (standard) (optional) | Hard-coated Aluminum Hardened Steel (ST) Ceramic (CE) Plastic (PL) |
| Memory Capacity | 100 values plus maximum, minimum, average, peak, standard deviation and memory location | Maximum Speed (standard) (optional) | 2000 m / min 5000 m/min |
| Memory Operation | Continuous Mode: automatic storage of each displayed value until memory is full On-Demand Mode: displayed value is stored when <u>STORE</u> key is pressed Value will blink on/off, then "FFFF" | Housing | Die-cast Aluminum |
| Overrange Indicator | ± 7 steps, 1.5% per step | Dimensions | 2.95" W x 10.83" H x 1.77" D (75 x 275 x 45 mm) |
| Field Calibration Adjustment | RS-232C (4800 baud, 8-bit word length, no parity, 2 stop bits) | Weight (approximate) | 1.43 lbs. (650 g) |
| Serial Output | | Operating Temperature | 32 to 132 °F (0 to 45 °C) |
| | | Accessories Included | 4 AA batteries, output connector and operating instruction guide, all in a fitted, hard-plastic carrying case |

Specifications subject to change without notice.