# TX SERIES OF DIGITAL TENSION METERS

ACCURATE

DEPENDABLE

RELIABLE

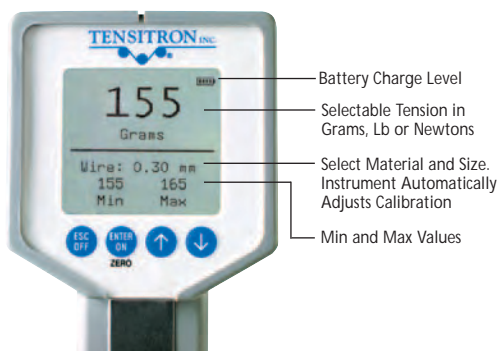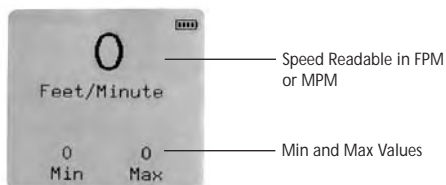TENSITRON

# TX

TENSITRON INC.

*The industry standard in tension meters and tension measuring since 1935*
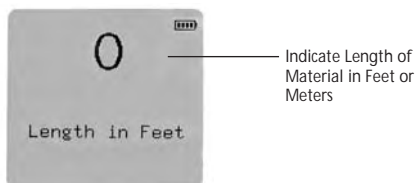
- Large, easy to read backlit, graphic display with adjustable backlighting and contrast.

- Display shows tension, name of calibration selected, running line minimum and maximum tension values, and battery charge level.

- Select tension values to display in Grams, lb, Newtons, or cN.

- Instruments come with calibrations for numerous wire and filament sizes.

- Up to 10 additional custom calibrations may be programmed into instrument. (All calibrations password protected).

- Choose your calibration by first highlighting and selecting the material (either wires, filaments, or custom), then the units of measurement (inches, mm, AWG wire sizes, or custom). Lastly, select the material size or gauge number, and push "Enter". The instrument automatically adjusts to the calibration you've selected with a full-scale accuracy of +/- 1%. (Full-scale accuracy for custom sizes is material specific.)

- Selectable LCD refresh rates allow for stable digital readings.

- Re-chargeable NIMH batteries and power supply provided. Approximately 9 hours of operation per battery charge. Automatic shut-off after 10 minutes of non-use.

- Instruments may be operated continuously while connected to power supply.

- Numerous application-specific models available.

- All instruments factory-calibrated and ready for use. Calibration certificate included. All calibration values traceable to National Standards.

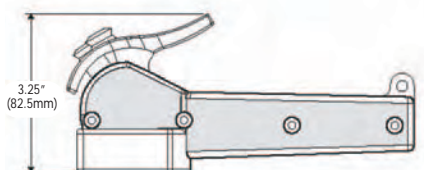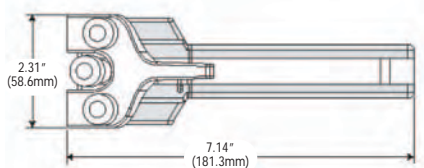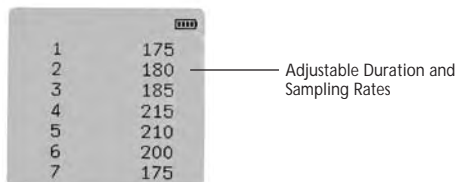- All models typically available from stock.

## Speed

Battery Charge Level
Selectable Tension in Grams, Lb or Newtons
Select Material and Size. Instrument Automatically Adjusts Calibration
Min and Max Values

Speed Readable in FPM or MPM
Min and Max Values

## Length

Indicate Length of Material in Feet or Meters

## Data Logging

Adjustable Duration and Sampling Rates

2.31"
(58.6mm)

7.14"
(181.3mm)

3.25"
(82.5mm)

## STANDARD INSTRUMENTS

| MODEL | RANGE | RESOLUTION |
|---|---|---|
| TX-125 | 0-125 Grams | 0.1 to 1 g |
| TX-1000 | 10-1000 Grams | 1 to 5 g |
| TX-5000 | 50-5000 Grams | 5 to 10 g |

Standard models provided with V-groove rollers.

## APPLICATION-SPECIFIC METER

TX-5EDM, 50-5000 Grams - For use on EDM wires.

## AVAILABLE OPTIONS FOR ALL INSTRUMENTS

*Note: Add option-designator letter to the end of the Model Number. (For example, a Model TX-1000-S denotes a standard TX-1000 with the optional Speed and Length function included.)*

**-R    Custom Roller option.** Choose from numerous sizes of cylindrical, flanged, or U-shaped rollers.

Note:  For tapes, webs, and custom materials please provide thickness, width, or diameter with order.

**-S    Speed and Length option.** Indicate real-time speed in FPM, or MPM. Maximum measurable speed is 9,999 FPM or 9,999 meters per minute, however line speeds in excess of 2,000 FPM are generally unsafe for hand-held applications.  Read length of part run in feet or meters.  Maximum length measuring up to 9,999 meters or feet.

**–A    Analog Output option** for both speed and tension values.  0-5 VDC or 4-20 mA with software-definable ending sequences.  Provided with 10′ cable.  Data outputted at 40 Hz.

**–E    RS-232 Serial Output option.**  Provided with 10′ cable to interface with your receiving device.  Select data sampling rate from 1, 2  or 5 Hz.

**–D    Data Logging option.** Capture and view data within a user-defined time window. Select the time window; then select the sampling rate (from 1-100 Hz). After capturing the data, review the data on the instrument's display or upload it using the 10′ serial interface cable.

*Instruments can be configured with any or all of these options.*

## ADDITIONAL OPTIONS FOR ALL METERS

•   Input real-time serial data into any Windows® application using the optional software WinWedge Pro® for Windows®, or configure your Windows® operating  system to capture the data via Hyper Terminal®.

•   Euro Plug.  P/N: TX-15-PS-240

•   Magnetic or rigid Mounting bracket. P/N: TX-350

## SPECIFICATIONS

•   Approximate weight .75 lbs (14 oz), depending upon configuration.

•   Re-chargeable NIMH battery assembly and power supply provided.  (For input voltages between 100–240V, use power supply P/N: TX-15-PS-240)

•   Durable, lightweight carrying case with protective foam inserts.

•   **CE certification**  complying with heavy, industrial, immunity standards.