

## TX-1 Series Digital Tension Meters

For small wire and other materials

### Versatile tension measurement for:

- Wire, filaments, or other thin materials
- Tension up to 5000 g. (11 lb.)
- Moving or static applications

### Easy to use:

1. Turn unit on and select material to be measured.
2. Pull trigger. Place material under rollers. Release trigger to engage material.
3. Tension will display.



### Convenient, quantifiable quality control

### Ideal for coil winding, textile manufacturing, EDM wire, and more.

- Superior technology
- Easy operation
- High precision
- Powerful features

### Features:

- Calibrated for extensive selection of filaments and copper wires
- Custom calibrations available (up to 10)
- Accurate +/- 1% **full-scale** (standard)
- Measures static or dynamic material
- Displays tension in g, lb, or N
- Stores tension values with one touch

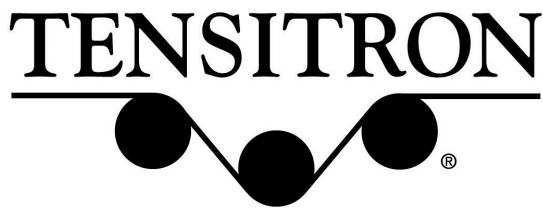


- Dynamic Bar Graph provides quick, color visual of tension levels
- Calculates Data Statistics (count, max, min, average, standard deviation)
- **Stabilizes readings on moving material** with adjustable LCD refresh rates and data averaging feature
- Rechargeable battery powers the instrument for up to 12 hours of continuous use
- Large, clear, color display
- One-year warranty against factory defects
- Lightweight, protective carrying case included
- Data can be output to an electronic device with RS-232 or analog output option
- Calibration certificate included with values traceable to NIST Standards
- Mounting Bracket available
- Made in the USA



**Made in USA**

TO ORDER: Email: [Sales@Tensitron.com](mailto:Sales@Tensitron.com), T: 303-702-1980, F: 303-702-1982  
TENSITRON ~ 733 S. Bowen Street, Longmont, CO 80501, USA  
SEE OUR WEBSITE: [www.Tensitron.com](http://www.Tensitron.com)



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### Models:

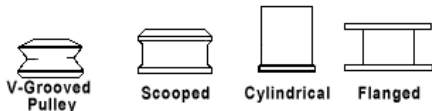
- **Standard Calibrations:** TX-1 meters come with standard calibrations for extensive selections of copper wire and filaments. (See the chart on the right.)
- **Special Calibrations:** Up to 10 special calibrations can be added for other materials, such as:
  - Large copper wire up to 20 AWG (1/32", .032", .8 mm)
  - Tape, ribbon up to 2" wide (50mm)
  - Fiber optics, fiber tow
  - Solid steel wire up to .02" (.5mm)
  - Braided steel wire up to .04" (1mm)
- **Custom Rollers:** Some materials may require custom rollers (see Options below).
- **Larger Applications:** For larger wires or higher tension, use an LX-1.

<u>Model</u>	<u>Standard TX-1 Menu Selections</u> Custom calibrations are available for other diameters and materials.		<u>Tension Range</u>
	Copper Wire	Filaments	
TX-125-1	<b>54 - 37 AWG</b> .0002" - .0044" .01 - .11 mm	.0001" - .006" .01 mm - .15 mm	0 - 125 g.
TX-1000-1	<b>40 - 32 AWG</b> .0002" - .008" .08 mm - .20 mm	.0001" - .013" .01 mm - .30 mm	10 - 1000 g.
TX-5000-1	<b>40-28 AWG</b> .0002" - .012" .08 mm - .30 mm	.0001" - .019" .01 mm - .5 mm	50 - 5000 g.
TX-5EDM-1	.10, .15, .20, .25 and .30 mm EDM Wire		

### Options:



#### STANDARD CONTACT ELEMENTS



Part No.	Option Name	Option Description
-A	Analog Output	Outputs continuous tension readings for remote monitoring and automatic responsive action
-E	RS-232 Digital Output	Uploads stored or real-time tension values to your electronic device
-R	Custom Rollers	TX-1 meters come standard with V-grooved pulleys for measuring wires and filaments. Custom rollers (see diagram) are available for measuring other materials.
-S	Speed & Length	Indicate real-time speed (in FPM or MPM) and length of material measured.
TX-350	Mounting Bracket	Mount your meter for safe, hands-free monitoring ( <i>for continuous monitoring, ask about Tensitron transducers</i> )

### Specifications:

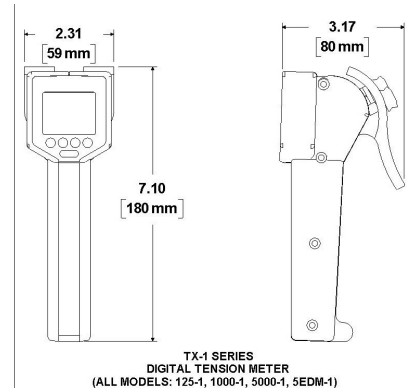
**Accuracy:** 1% +/- full-scale (standard). Accuracy for custom calibrations is material-specific.

**Battery:** NiMH (NOT lithium ion). Safe for air transport. Rechargeable. Up to 12 hours continuous use per charge.

**Power supply:** Input: 100-240VAC, 50-60Hz, 0.48A, Output: 9 VDC, 2.2A

#### Weight & Dimensions:

- Instrument only: 7.10" x 2.31" x 3.17", .75 lbs (14 oz.)
- Instrument & Case: 12" x 9.5" x 3.75", 2 lb. 10 oz.
- Shipment weight & dimensions (1 unit in case): 16" x 12" x 7", 4 lb.



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