MESUR Lite data acquisition software is included with the WT3-201M

The WT3-201M motorized wire crimp pull tester is designed to measure pull-off forces of up to 200 lbF [1 kN] for wire and tube terminations. The tester conforms to numerous UL, ISO, ASTM, SAE, MIL, and other requirements for destructive testing. Non-destructive testing is also possible, such as pulling to a load or maintaining a load for a specified period of time, as per the requirements of UL 486A/B. Programmable pass/fail limits with red and green indicators and audio alerts help identify non-conforming samples.

The tester accommodates wire sizes up to AWG 3 (0.25 in [6.3 mm] OD), or custom sizes via the available machinable blank fixture. Auto-start automatically begins the test when the wire sample has been loaded. When the sample breaks, the tester can auto-reverse, output the peak force, store the peak force, and zero the display automatically, thereby increasing testing throughput. Further testing efficiency is achieved via the available Profiles function, through which multiple test setups may be saved and recalled as required.

On-board data storage and statistical calculations is provided for up to 2,000 readings, with available date and time stamp for each saved data point. Data can be transferred to a PC or other data collector via USB, RS-232, Mitutoyo (Digimatic), or analog outputs.

The WT3-201M includes MESUR™ Lite data acquisition software. MESUR™ Lite tabulates continuous or single point data. One-click export to Excel allows for further data manipulation.

Features

- Measures real-time and peak force values
- Selectable test speed, w/high speed approach and reverse
- Auto-start upon sample insertion
- Auto-reverse at sample break or load
- USB, RS-232, Mitutoyo (Digimatic), and analog outputs
- Automatic reverse / output / data storage / zeroing upon sample break helps automate testing processes
- 2,000-point data memory with statistics, output, and date and time stamp (date and time stamp is optional)

- Password protection prevents unauthorized changes
- Pass / fail indicators, audio alerts, and outputs
- Save and recall up to 500 profiles for various test requirements (optional function)
- Pull to a specified load or maintain load for a specified period of time, as per UL 486A/B (optional functions)
- Date / time stamp for all saved data (optional function)

Key Features
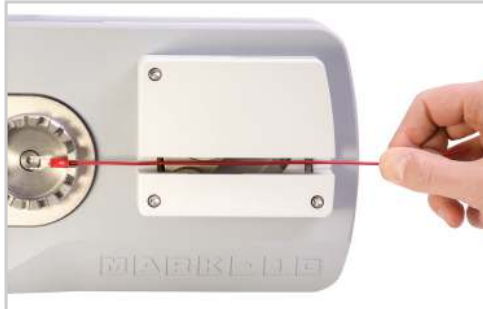
The tester automatically starts when the sample is loaded, and returns to home when the sample breaks. Adjustable terminal fixture accommodates wire diameters up to 0.25 in (6.3 mm)

As the test begins, serrated cams engage the sample. A pinch guard (red tab shown above) automatically rotates into position, for added safety.

Save and recall multiple profiles, for quick and accurate switchover to different test methods.

Controls & Indicators

Status
Peak measurement
Real time or peak reading
Save up to 4,800 readings
Save up to 500 test profiles
Measurement mode (real time or peak)
Easily access all settings
Output to a PC, printer, etc. (auto-output also possible)
Toggle between real time and peak display modes

Upper force limit
Pass / fail indicators
Unit of measurement
Lower force limit
Start the test (auto-start also possible)
Zero the reading (auto-zero at sample break also possible)
Stop / reverse the test

Specifications subject to change without prior notice

Optional Functions

Any of these optional functions may be purchased at time of order or may be enabled in the field at a later date though a simple activation process. A complete options package is also available, including all of the listed features at a discounted price. The tester is shipped in Demo Mode, during which time all available functions are enabled for 160 hours of operation.

Feature	Part No.	Description
Profiles	WF010	Save and recall sets of test parameters, such as speed, pass/fail limits, unit of measurement, etc. Maximum of 500 profiles may be stored.
Pull to load	WF011	The tester will stop when the specified load has been reached.
Load holding	WF012	The tester will stop and maintain a specified load for a specified period of time.
Date and time stamp	WF013	A date and time stamp is applied to each saved data point.
Complete options package	WFCOMP	Includes all Controller Features listed above.

Optional Accessories

AC1049
Calibration fixture
Complete set of brackets and hardware for calibration of Mark-10 motorized and manual wire crimp pull testers. Weights and hanger not available from Mark-10.

WT3004
Carrying case
Provides storage space for the WT3-201M tester, optional ring terminal fixture, power cord, USB cable, and accessories.

WT3002
Ring terminal fixture
Secures ring terminations. Pin diameters from 1/8 to 3/8 in [3.2 to 9.5 mm].

WT3003
Machinable blank terminal fixture
For unique sample shapes and sizes.

MARK-10

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3 YEAR WARRANTY

Specifications subject to change without prior notice

Specifications

Force Capacity:	200 x 0.1 lbF	3200 x 2 ozF	100 x 0.05 kgF	1,000 x 0.5 N	1 x 0.0005 kN
Accuracy:	±0.2% of full scale
Wire dia. range:	AWG30 - AWG 3 [0.01 - 0.25 in (0.3 - 6.3 mm)]
Sample length range:	Minimum 6.5 in [165 mm], excluding termination
Max. elongation:	1.7 in [43 mm]
Speed range:	**Test speed:** 0.4 - 12.0 in/min [10 - 300 mm/min] **Approach/reverse speed:** 13.0 - 96.0 in/min [325 - 2,400 mm/min]
Speed setting accuracy:	±0.2%
Speed variation with load:	±0% [Stepper motor driven]
Power:	Universal input 80-240 VAC, 50/60 Hz
Sampling Rate:	7,000 Hz
Outputs:	**USB / RS-232:** Configurable up to 115,200 baud. **Mitutoyo:** Serial BCD suitable for all Mitutoyo SPC-compatible devices. **Analog:** ±1 VDC at capacity, ±0.25% of full scale. **General purpose:** Three open drain outputs, one input. **Set points:** Three open drain lines.
Safe overload:	150% of full scale (display shows "OVER" at 110% and above)
Weight:	26.5 lb [12.0 kg]
Included items:	Power cord, quick-start guide, USB cable, resource CD (USB driver, MESUR™ Lite software, MESUR™gauge DEMO software, and user's guide), and NIST-traceable certificate of calibration.
Environmental requirements:	40 - 100°F, max. 96% humidity, non-condensating
Warranty:	3 years (see individual statement for further details)

Dimensions in [mm]
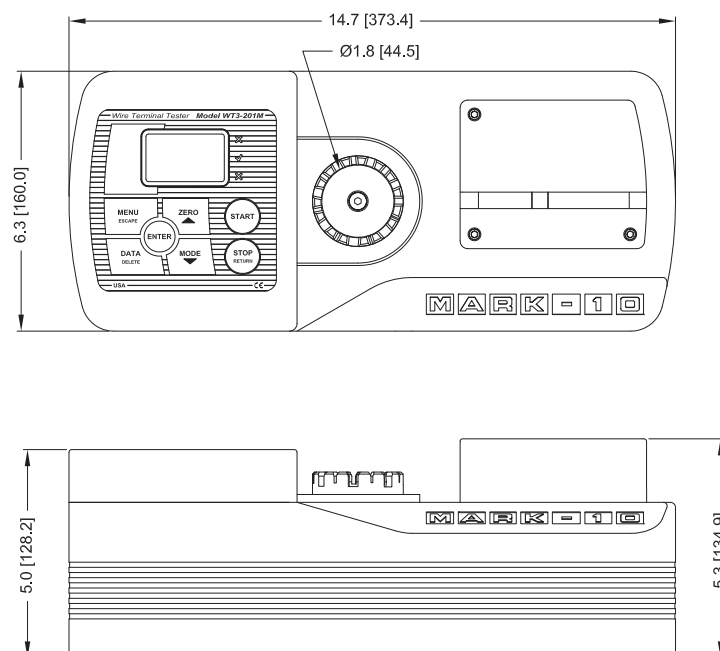
Ordering Information

Hardware	
WT3-201M*	Motorized wire crimp pull tester
WT3002	Ring terminal fixture
WT3003	Machinable blank terminal fixture
WT3004	Carrying case
AC1049	Calibration kit
Controller Options	
WF010	Profiles
WF011	Pull to load limit
WF012	Load holding
WF013	Date and time stamp
WFCOMP	Complete options package for WT3-201M

* WT3-201M contains a universal power supply (100 - 240V) and includes a power cord with US plug. Add suffix 'E' for Euro plug, 'U' for UK plug, or 'A' for Australian plug. Ex: WT3-201ME

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