



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 most insulation types and wire sizes up to AWG 3 (0.25 in [6.3 mm] OD). Samples can be sent to Mark-10 for evaluation prior to purchase. 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.

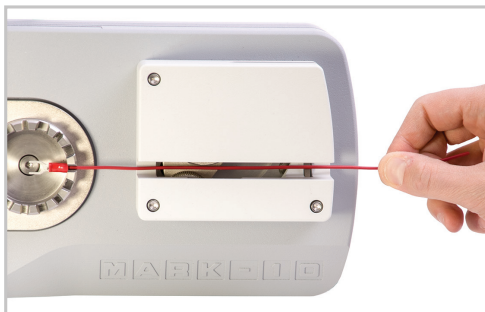
On-board data storage and statistical calculations is provided for up to 2,000 readings, with available date and time stamp for each saved data point. Data can be transferred to a PC or other data collector via USB, RS-232, Mitutoyo (Digimatic), or analog outputs.

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)

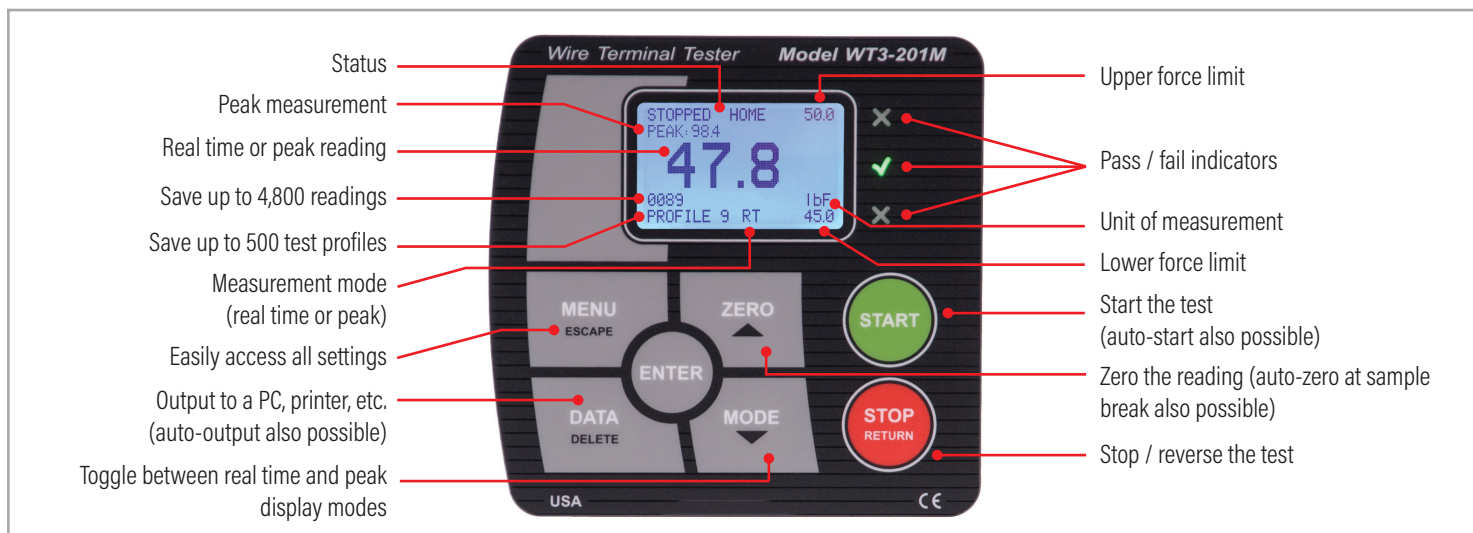


- ▲ As the test begins, serrated cams engage the sample. A pinch guard (red tab shown above) automatically rotates into position, for added safety.



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

## Controls & Indicators



## 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 through 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
<b>Profiles</b>	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.
<b>Pull to load</b>	WF011	The tester will stop when the specified load has been reached.
<b>Load holding</b>	WF012	The tester will stop and maintain a specified load for a specified period of time.
<b>Date and time stamp</b>	WF013	A date and time stamp is applied to each saved data point.
<b>Complete options package</b>	WFCOMP	Includes all Controller Features listed above.

## Optional Accessories



**WT3004-1**  
**Carrying case**

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

Mark-10 Corporation  
11000 Mark-10 Drive, Dayton, OH 45424 USA Tel: 631-842-9200 Email: info@mark-10.com

**CERTIFICATE OF CALIBRATION**  
LONG FORM

MODEL NO. MS-100  
SERIAL NO. 10000000  
DESCRIPTION: DIGITAL FORCE GAUGE  
CAPACITY: 100 LBF

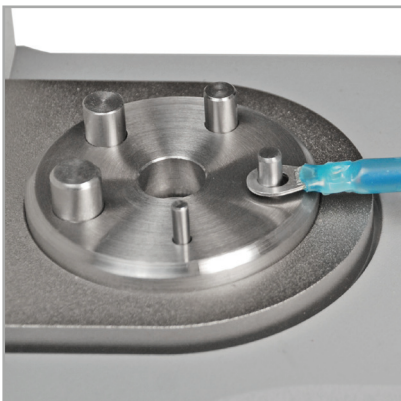
RELATIVE HUMIDITY (%) 47%  
TEMPERATURE (°F) 73.0 F  
TOLERANCE (mm) 0.1  
RECALIBRATION DATE 01/02

READING	MASTER	TOLERANCE	ERROR	DATE	REMARKS	ERROR
NUMBER	READING	READING	READING	DATE	REMARKS	READING
1	10.00	10.02	0.02	10/01	10.00	0.02
2	20.00	20.02	0.02	10/01	20.00	0.02
3	30.00	30.02	0.02	10/01	30.00	0.02
4	40.00	40.02	0.02	10/01	40.00	0.02
5	50.00	50.04	0.04	10/01	50.00	0.04
6	60.00	60.04	0.04	10/01	60.00	0.04
7	70.00	70.02	0.02	10/01	70.00	0.02
8	80.00	80.02	0.02	10/01	80.00	0.02
9	90.00	90.02	0.02	10/01	90.00	0.02
10	100.00	100.00	0.00	10/01	100.00	0.00

By: \_\_\_\_\_ Date: \_\_\_\_\_

**CERT**  
**Calibration certificate with data**

Includes 10 data points (short form certificate without data is included).



**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.



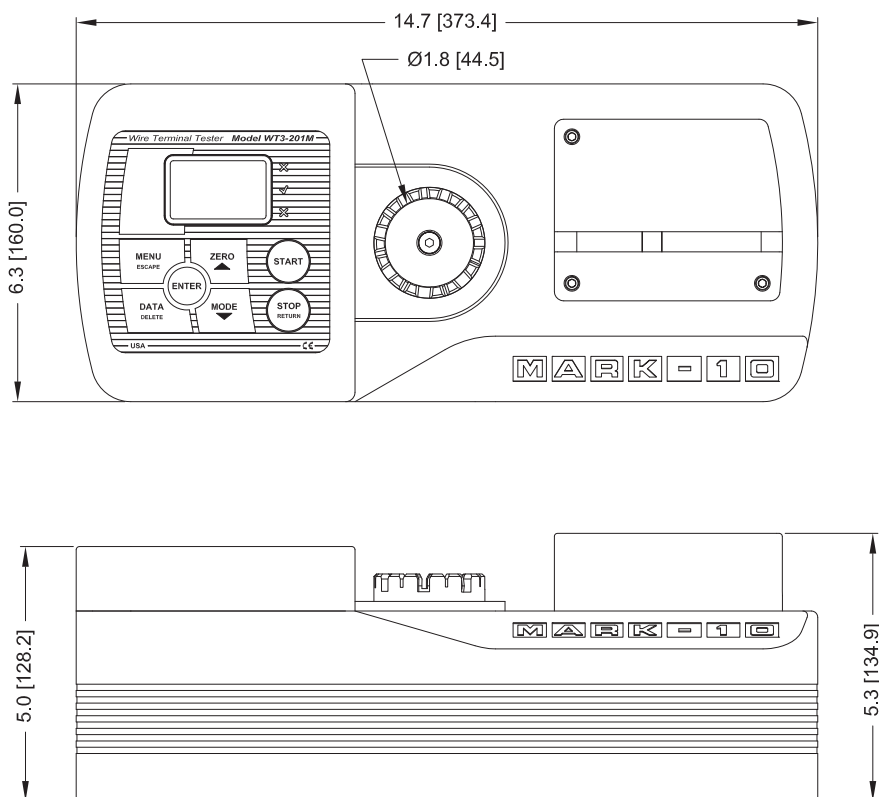
**AC1049**  
**Calibration fixture**

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.

## 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:	<b>Test speed:</b> 0.4 - 12.0 in/min [10 - 300 mm/min] <b>Approach/reverse speed:</b> 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:	AC adapter: 100-240VAC, 50-60 Hz, 0.3 A Battery: Rechargeable 8.4V NiMH Low battery indicator appears when battery level is low, and gauge powers off automatically when power reaches critical stage.
Sampling Rate:	7,000 Hz
Outputs:	<b>USB / RS-232:</b> Configurable up to 115,200 baud. <b>Mitutoyo:</b> Serial BCD suitable for all Mitutoyo SPC-compatible devices. <b>Analog:</b> ±1 VDC at capacity, ±0.25% of full scale. <b>General purpose:</b> Three open drain outputs, one input. <b>Set points:</b> Three open drain lines.
Safe overload:	150% of full scale (display shows "OVER" at 110% and above)
Weight:	26.5 lb [12.0 kg]
Environmental requirements:	40 - 100°F, max. 96% humidity, non-condensating
Warranty:	3 years (see individual statement for further details)

## Dimensions in [mm]

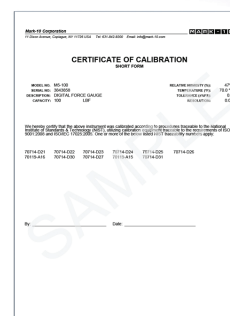




## In The Box

The WT3-201M Wire Crimp Pull Tester is shipped as shown at right and includes the following accessories:

- (1) USB cable
- (1) Power cord
- (1) Certificate of calibration without data (data is optional)



## Ordering Information

Hardware	
WT3-201M	Motorized wire crimp pull tester
WT3002	Ring terminal fixture
WT3003	Machinable blank terminal fixture
WT3004-1	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

## Alternative Power Cords

The WT3-201M contains a universal power supply (80 - 240V) and power cord with US prong style. Select alternative power cords from the table below.

Model	Description
AC1139	Power cable, EUR
AC1140	Power cable, UK
AC1141	Power cable, AUS