# 5kN, Tensile Testing Machine MATERIAL TESTING



# UTM-508M1/513M1, Material Testing Machines

Single column machine has good configuration in machine of volume and operation. It is suitable for under 5KN of small section of material test. The machine can base on specimen length and elongation to choose different model and grips.

This model is using special testing software which is use Windows 7/8 of Person computer. It can do tensile test, compression test, bending test, bending test and all kind of test. The software with multi-languages is very easy to operation. It also has all kind of metric units, real-time graphs and also provides complete analysis test data which finish test can do variety of material analysis.

## Standard:

ISO 7500-1 , ASTM E4 , ASTM D-76, DIN5122 , JIS B7721/B7733 , EN 1002-2, BS1610,GB T228

# Industry:

Rubber, Plastic, Paper, Textile, metal, wood, tape, electron, package, Medical, Architecture.



## Features:

- The seal plates are treated by anode hardening, and the ball screws are equipped with dust -proof cover to extend its lifetime and precision.
- Hardware protectionUp/down limit, emergency stop button.
- Servo-motor driven, precise decelerators and ball screws is used to reduce the noisy, loss of transmission.
- Load Cell comply with ASTM-E4 standard which accuracy is limited within 1.0% and adopt bridge circuit to sense the load force and export data. Load cell also includes memory lock to memorize various parameters. Machine and detects

also includes memory lock to memorize various parameters. Machine can detects the parameter automatically when switching different load cells.

- With external I/O junction to expand functions Inching control.
- Various grips & extensometers are available.

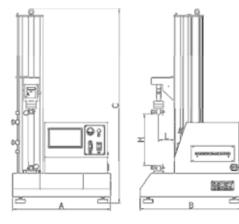
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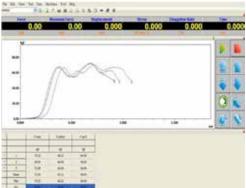
# Report

### **Machine dimensions:**



# Software:

- Data sampling rate: 100Hz, depending on computer efficiency
- Full-computerized control to run the test or Jog button control
- Compatible with Window 7 system
- Software has multi-languages.
- USB interface for TCP/IP
- Multi-curves display and real-time plot
- Various units of measurement are available
- Flexible form to manage database.
- Free to name the data file.
- Testing screen is selective to display data, graph at the same time.
- Data processing: file saving, setting loading, report printing and data comparing.
- Graph display: strain v.s. elongation, strain v.s. time and so on.
- Tensile test, compression test, bending test, peel test...
- Deformation of machine is revised automatically to ensure test data closing to the precise value.
- Software protection: Overload, over -displacement, over-time protection.



Software interface

Model	Width x Depth x Height A x B x C (mm)	Crosshead travel H (mm)	Front opening space L (mm)
UTM-508M1	500x530x1450	800	80
UTM-513M1-2L4	500x530x1750	1100	80
UTM-513M1	500x530x1000	400	80

Model	UTM-508M1	UTM-513M1	
Max. Capacity	5 KN		
Force resolution	1/10,000		
Test stroke	800 mm (w/o grip)	400 mm (w/o grip)	
Stroke resolution	0.0001 mm		
Cantilever distance	70 mm		
Speed range	0.03 $\sim$ 1000 mm/min adjustable (Set up by computerized)		
Speed precision	0.03 ~ 10 mm/min ± 2% 10 ~ 1000 mm/min ±1%		
PC-port	TCP/IP		
Data sample rate	Faster 100 Hz		
Hardware safety protection	Up/down limit, emergency stop button		
Motor type	Servo motor		
Stiffness Slop	284 kgf/mm		
Feature	<ul> <li>* Unique accessories with auto identification system, it does not have other complicated setting when use it.</li> <li>* Use inching with precision hand wheel to control machine up and down which can speed up adjust machine of position.</li> <li>* Standard model have keep multi-input signal and fixation. It can provide user to add more function in the future.</li> </ul>		
Power Supply	Single phase 200 ~ 240 VAC5 A		
Dimension / Weight	50×53×145cm / 80kg	50×53×100cm / 65kg	