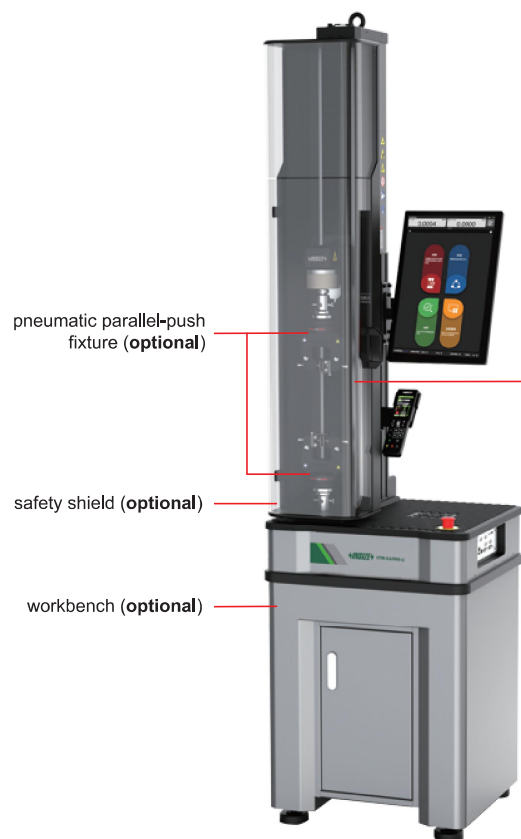


ELECTRONIC UNIVERSAL TESTING MACHINES (ADVANCED TYPE)

CUSTOMIZABLE



UTM-GA5000-U



light-sensing
interactive system
(included)

SPECIFICATION FOR LIGHT-SENSING INTERACTIVE SYSTEM

Equipment status	Light strip color	Light strip behavior
Power on	yellow	steady on
Standby (servo OFF)	yellow	bidirectional running lights
Standby (servo ON)	blue	steady on
Standby (servo ON)>60s	blue	breathing light
Alarm (limit, overload, etc.)	red	steady on
Upward	green	upward running lights
Downward	green	downward running lights
Load holding	green	steady on

- According to GB/T, ISO, ASTM, etc.
- For testing and researching the mechanical properties such as tension, compression, bending, shear, peeling and tearing of products including plastics, rubber, wires, electronic connectors (for insertion and extraction), metal wires, films, textiles, adhesives, biomaterials, elastomers, food packaging, small components, paper and springs
- Single-column structure, with compactness and high rigidity
- With powerful operation and analysis software
- With touchscreen and button integrated control box

SPECIFICATION

Part No.	UTM-GA10-U	UTM-GA50-U	UTM-GA100-U	UTM-GA500-U
Max. test force	10N	50N	100N	500N
Accuracy class	0.5 class			
Accuracy of test force	±0.5%			
Range of test force	0.4%~100%FS			
Resolution of test force	1/600000FS			
Accuracy of crossbeam displacement	±0.2% or ±.000394" (whichever is larger)			
Resolution of crossbeam displacement	.000524μin			
Range of test speed adjustment	1.97μin/min~94.49in/min			
Range of return speed adjustment	1.97μin/min~118.11in/min			
Accuracy of crossbeam speed	.00197in/min~100%FS, ±0.2% of the set value			
Resolution of deformation	1/600000FS			
Accuracy of strain measurement	superior to the requirements of standards such as GB/T 228, ISO 6892-1, ASTM E8, and ASTM E21			
Frequency of data sampling	1200Hz			
Frequency of control loop	1200Hz			
Stiffness	57100 lbf/in			
Vertical test space*	37.80"			
Distance between axis and frame	3.94"			
Protection function	force overload protection, limit protection, anti-collision protection, voltage overload protection			
Power supply	AC 110V, 60Hz, 0.6kW			
Dimension (L×W×H)	22.83×20.47×62.20"			
Weight	330.69lb			

*Can be customized according to test requirements

SPECIFICATION

Part No.	UTM-GA1000-U	UTM-GA2500-U	UTM-GA5000-U
Max. test force	1000N	2500N	5000N
Accuracy class	0.5 class		
Accuracy of test force	±0.5%		
Range of test force	0.4%~100%FS		
Resolution of test force	1/600000FS		
Accuracy of crossbeam displacement	±0.2% or ±.000394" (whichever is larger)		
Resolution of crossbeam displacement	.000524µin		
Range of test speed adjustment	1.97µin/min~94.49in/min		
Range of return speed adjustment	1.97µin/min~118.11in/min		
Accuracy of crossbeam speed	.00197in/min~100%FS, ±0.2% of the set value		
Resolution of deformation	1/600000FS		
Accuracy of strain measurement	superior to the requirements of standards such as GB/T 228, ISO 6892-1, ASTM E8, and ASTM E21		
Frequency of data sampling	1200Hz		
Frequency of control loop	1200Hz		
Stiffness	57100 lbf/in		
Vertical test space*	37.80"		
Distance between axis and frame	3.94"		
Protection function	force overload protection, limit protection, anti-collision protection, voltage overload protection		
Power supply	AC 110V, 60Hz, 0.6kW		
Dimension (L×W×H)	22.83×20.47×62.20"		
Weight	330.69lb		

*Can be customized according to test requirements

SPECIFICATION OF ELECTRONIC EXTENSOMETER (OPTIONAL)

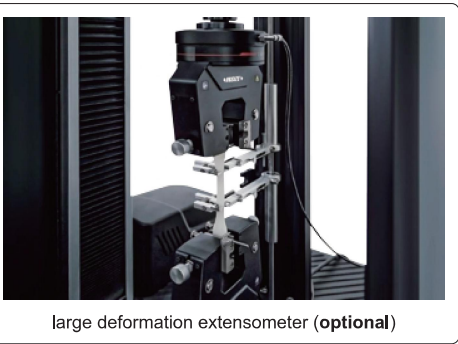
Part No.	Accuracy of deformation	Gauge length	Deformation
UTM-G-EX12D5-5	±0.5%	12.5mm	5mm
UTM-G-EX15-5		15mm	5mm
UTM-G-EX20-10		20mm	10mm
UTM-G-EX25-5		25mm	5mm
UTM-G-EX25-10		25mm	10mm
UTM-G-EX25-12D5		25mm	12.5mm
UTM-G-EX50-5		50mm	5mm
UTM-G-EX50-10		50mm	10mm
UTM-G-EX50-25		50mm	25mm
UTM-G-EX75-25		75mm	25mm
UTM-G-EX100-5		100mm	5mm
UTM-G-EX100-10		100mm	10mm
UTM-G-EX100-25		100mm	25mm
UTM-G-EX200-10		200mm	10mm
UTM-G-EX200-20		200mm	20mm
UTM-G-EX220-20		220mm	20mm
UTM-G-EX250-10		250mm	10mm
UTM-G-EX250-25		250mm	25mm
UTM-G-EX500-10		500mm	10mm
UTM-G-EX500-25		500mm	25mm
UTM-G-EX600-10		600mm	10mm



electronic extensometer (optional)

SPECIFICATION OF LARGE DEFORMATION EXTENSOMETER (OPTIONAL)

Part No.	UTM-G-EX100L	
Range of deformation	10~850mm	
Accuracy of deformation	±0.5%	
Resolution of deformation	7.8μm	
Gauge length	10mm, 15mm, 20mm, 25mm, 50mm, 75mm, 100mm (adjustable)	
Accuracy of gauge length	±0.25mm (room temperature)	
Type of knife edge	flat blade edge, rubber roller blade edge	
Range of clamp	thickness≤20mm, width≤30mm	
Range of clamping force	1.01~5.28lbf	
Length of measure arm	142~165mm	
Weight	11.02lb	



large deformation extensometer (optional)

SPECIFICATION OF AUTOMATIC EXTENSOMETER (OPTIONAL)

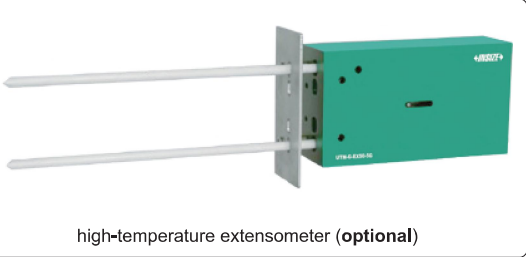
Part No.	UTM-G-EX350A	UTM-G-EX450A
Length of clamping arm	350mm	450mm
Range of deformation	0~80mm	0~100mm
Accuracy of deformation	<0.0015mm (deformation: 0~0.3mm) <0.5% (deformation: 0.3~100mm)	
Resolution of deformation	0.5μm	
Range of gauge length	20~250mm	
Accuracy of gauge length	±0.5%	
Type of knife edge	flat blade edge, arc blade edge	
Range of clamp	flat: 0.2~40mm, circular: Ø2~Ø40mm	



automatic extensometer (optional)

SPECIFICATION OF HIGH-TEMPERATURE EXTENSOMETER (OPTIONAL)

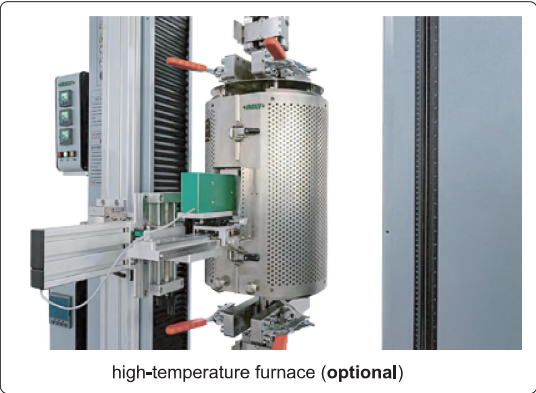
Part No.	UTM-G-EX50-5H	
Range of deformation	0~5mm	
Accuracy of deformation	±0.5%	
Resolution of deformation	0.01μm	
Gauge length	25mm, 50mm (adjustable)	
Sensitivity	2mV/V	
Linearity	<0.15%FS	
Type of knife edge	flat blade edge	
Clamping force	.45lbf	
Test temperature	room temperature~2192°F	
Weight	2.09lb	



high-temperature extensometer (optional)

SPECIFICATION OF HIGH-TEMPERATURE FURNACE (OPTIONAL)

Part No.	UTM-G-FU1200-U	
Internal structure	three-segment electric heating elements with segmented control	
Range of temperature control	392°F~2192°F	
Temperature fluctuation	±37.4°F (392°F~1652°F) ±39.2°F (1652°F~2192°F)	
Temperature gradient	≤37.4°F (392°F~1652°F) ≤39.2°F (1652°F~2192°F)	
Effective temperature uniformity	5.91"	
Furnace heating wire	resistance wire: .0315~.0472" DIA KANTHAL-A1	
Service life of high-temperature furnace	operating time>10000 hours (≤2192°F)	
Heating power	3.2kW	
Power supply	AC 480V, 3Ø, 60Hz	



high-temperature furnace (optional)



video extensometer (optional)

STANDARD DELIVERY

Main unit	1 pc
Control box	1 pc
Measuring software	1 pc
Computer	1 pc
Printer	1 pc
Compression fixture	1 set
Tensile fixture	1 set



pneumatic parallel-push fixture (optional)

OPTIONAL ACCESSORY

Fixture	rubber tensile fixture, film tensile fixture, bending fixture, pneumatic fixture other fixtures (customized)
Electronic extensometer	UTM-G-EX series (customizable)
Large deformation extensometer	UTM-G-EX100L (customizable)
Automatic extensometer	UTM-G-EX350A (customizable) UTM-G-EX450A (customizable)
High-temperature extensometer	UTM-G-EX50-5H (customizable)
High-temperature furnace	UTM-G-FU1200-U (customizable)
Video extensometer	UTM-M series
Security door	UTM-G-SD1
Workbench	UTM-G-W1