

**Microcomputer Controlled Electronic Universal Testing Machine HLL-3000 Series**



## Main Specification

Model	HLL-3130	HLL-3140	HLL-3230	HLL-3240	HLL-3340	HLL-3530	HLL-3540
Code#	512-411	512-711	512-511	512-811	512-911	512-611	512-011K
Max test force(kN) (can be extended)	1kN	10kN	2kN	20kN	30kN	5kN	50kN
Structure	Four columns floor type (upper tensile, lower compression / upper compression, lower tensile)						
Control method	Computer automatic control						
Test accuracy	0.5 class						

Test force test arrange(F·S)	0.4%~100%F·S( stepless )
Force Resolution	1/500,000 of Max. force, without step division
Large deformation measuring range	10-800mm
Large deformation indication error	≤±0.5%
Large deformation measurement resolution	0.008mm
Deformation measuring range	0.2%~100%FS
Deformation value relative error	≤±0.5%
Displacement resolution	0.04um
Displacement value relative error	≤±0.5%
Range of force control rate adjustment	0.005~5%FS/S
Test force value relative error	≤±0.5%
Speed adjust range	0.001~500mm/min
Speed error	≤±0.5%
Effective tensile space	850mm(Contain the grip)
Effective compression space	850mm(Contain the grip)
Effective test width	400mm
Pressure plate diameter	100mm
Dimension	750*520*1830mm (Can be customized)
Weight	300KG around
Power supply	AC220V±10%,50Hz, 0.75KW
Standard Accessories	Decelerator, PC, printer, Smartest software, wedge tensile grip, jaws, compression platen, Multiple loadcells in one machine is available.

## Main Features

- 1, Perform tension, compression, flexure/bending and shearing for specimens. Suitable for metal and nonmetal material, such as iron, steel, steel bar, rebar, rod, spring steel, wire, cable and so on.
- 2, Series computer controlled electronic UTM is dual space structure, tensile test executed at upper side of crosshead, compression and bending test executed at lower side of crosshead.

- 3, High stiffness of the leading screw and robust crosshead structure, maximum elimination the affection of loadframe deformation;
- 4, Matched with various test fixture, like peel, puncture, tear, pneumatic grip, belt tension etc., this UTM can be used to metal, non-metal, composite material like rubber, steel wire, plastic, seat belt, textile character test.
- 5, Standards: Comply with ISO, BS, ASTM, JIS standard and so on.
6. Measuring and control system:
  - 6.1 Based on full digital STC300 measuring and control card;
  - 6.2 Realize load, deformation, cosshead displacement, test process four kind close loop control;
  - 6.3 Data collection system use 4 channel of high accuracy 24 digit A/D converter;
  - 6.4 Resolution can upto 1/500000, full range without step;
  - 6.5 Choose BB, AD, Xilinx etc. brand famous integrated components, fully digital design;
7. Loadframe structure and Driven type:
  - 7.1 Loadframe is floor type, with high strength, low deformation, compact structure and beautiful appearance;
  - 7.2 Adopt Circular Arc Profile Synchronous Belt Transmission, eliminate dual direction clearance;
  - 7.3 Adopt Japansonic AC servo motor and driving system, ensure transmission and moment of force stable;
  - 7.4 Adopt imported high accuracy ball leading screw, stable transmission.