

LR150KPlus 150 kN Universal Materials Testing Machine

The LR150KPlus advanced materials testing machine incorporates an extensive range of features making it ideal for performing complex as well as routine testing applications up to 150 kN (33722 lbf). The LR150KPlus is a floor standing machine featuring a twin column design with a maximum crosshead travel of 1150 mm (45.3 in). Extended machine column options (LR150KPlus-E models) for testing higher elongation materials are also available.

The machine is microprocessor controlled and incorporates world proven 32 bit technology for highly accurate load measurement and rapid data acquisition. The LR150KPlus features an integral user interface consisting of a side mounted control console with large, positive action membrane keys, allowing complex tests to be performed at the touch of a button. A back lit 4 line LCD display shows the test and set up information in a wide choice of user selectable languages and units.

The stand alone system is capable of storing up to 600 test results from a choice of ten programmable test set ups. Test parameters are entered using the keypad in a sequential menu driven format.

For additional flexibility, the LR150KPlus can also be connected to a personal computer with optional Lloyd Instruments NEXYGENPlus material test and control software. NEXYGEN software provides almost unlimited testing and results processing capability in a familiar Windows® environment.

The high stiffness frame incorporates a crosshead guidance system to prevent side loading of the sample under test. Stiffness compensation on the LR150KPlus machine allows compensation to be made for any deformation, however small, of the load frame, load cell and grips of the instrument itself during compression testing. The crosshead is driven by twin lead screws and a high precision servo motor and DC servo system to achieve a wide range of speeds.

A series of highly accurate, interchangeable load cells are also available for tension, compression and cycling through zero force measurements. Our extensive range of grips and fixtures support virtually any type of test. The system is ideal for use in production, quality control, education and research environments.

Features

- Simple to set up, operate and maintain
- High accuracy load measurement
- Constant load holding
- Data sampling rate 8 kHz
- Load rate control
- Saves up to 600 test results
- 10 programmable test set ups
- Pre-loading of samples and cycling to load or extension limits
- Multi-stage testing with NEXYGENPlus software
- Extension resolution <0.04 microns
- Multi-lingual display options
- Multi-unit display options
- Flash upgradeable
- Extended column options for testing higher extension materials
- Wide selection of load cells, grips, jigs, extensometers, temperature chambers and other accessories

Specifications

Force Capacity:	
LR150KPlus (Standard)	150 kN (33722 lbf)
LR150KPlus-E (Extended)	150 kN (33722 lbf)
Crosshead Speed Range:	0.001 to 254 mm/min (0.00004 to 10 in/min)
Speed Accuracy:	<0.2% at steady state
Maximum Crosshead Travel:	
LR150KPlus	1150 mm (45.3 in)
LR150KPlus -E	1620 mm (63.8 in)
Width Between Columns:	620 mm (24.4 in)
Minimum Load Resolution:	0.0001 N (Load cell specific)
Load Cell Accuracy:	<0.5%
Extension Resolution:	<0.04 microns
Data Sampling Rate:	8 kHz
Display:	40 character x 4 line backlit LCD
Extensometer Inputs:	Digital and Analogue
Load Measuring System:	EN ISO 7500:2004 Class 0.5 ASTM E4
Software:	NEXYGENPlus Data Analysis Software (optional)
Supply Voltage:	
	230Vac ±10%, 50-60 Hz, Fuse T5AH250V, 115Vac ±10%, 50-60 Hz, Fuse T10AH250V
Weight:	
LR150KPlus	900 kg (1984 lb)
LR150KPlus-E	910 kg (2006 lb)
Operating Temperature:	5° to 35° C (41° to 95° F)

