technical specification

24 month warranty

	TA.XT*plusC*	TA.XT*plusC* Extended Height	TA.XT*plus100C*	TA.XT*plus100C* Extended Height	TA.HD*plusC*
Overall Height	650mm	900mm	670mm	920mm	970mm
Frame Capacity	50kg.f (500N)	50kg.f (500N)	100kg.f (1kN)	100kg.f (1kN)	750kg.f (7.5kN)
Loadcells	0.5, 5, 10, 30, 50kg.f	0.5, 5, 10, 30, 50kg.f	0.5, 5, 10, 30, 50, 100kg.f	0.5, 5, 10, 30, 50, 100kg.f	0.5, 5, 30, 50, 100, 250, 500, 750kg.f
	Loadcells are directly interchangeable by the user. Loadcells store factory calibration and may be calibrated using a precision weight				
Loadcell Accuracy	0.5% of reading down to 1% of loadcell capacity				
Displayed Force Resolution	0.1g	0.1g	0.1g	0.1g	0.1g
Distance Resolution	0.001mm	0.001mm	0.001mm	0.0005mm	0.001mm
Speed Range	0.01 – 40mm/s	0.01 – 40mm/s	0.01 – 20mm/s	0.01 – 20mm/s	0.01 – 20mm/s
Speed Accuracy	Better than 0.1%	Better than 0.1%	Better than 0.1%	Better than 0.1%	Better than 0.1%
Maximum Aperture	370mm	590mm	350mm	600mm	550mm
Dimensions	650 x 280 x 540mm	900 x 280 x 540mm	670 x 280 x 540mm	920 x 280 x 540mm	967 x 545 x 475mm
Sample Testing Area	247 x 228mm	247 x 228mm	247 x 228mm	247 x 228mm	320 x 298mm
Width between Columns	–	–	–	–	320mm
Net Weight	14.9kg	16.5kg	19.3kg	22.3kg	39.2kg
Touchscreen Data Acquisition Rate	2000pps	2000pps	2000pps	2000pps	2000pps
Touchscreen Locking	Yes	Yes	Yes	Yes	Yes
Touchscreen Operation Languages	Multiple languages available				
Software Data Acquisition Rate	0.1 – 500pps (*Exponent Connect Lite*) or 0.1 – 2000pps (*Exponent Connect*) for each data channel (except RS485) – oversampled at 16000Hz				
	Customisable variable data acquisition rates during a test plus data capture on/off option (*Exponent Connect* only)				
Measuring Units	g, mm, s (Metric) or lb, in, s (Imperial – software only)				
Test Types	Library tests: Cycle, Hold, Return to Start, Repeat, Adhesive Test, TPA. Apply Distance and Apply Force options.				
	Totally programmable arm movement sequencing when used in conjunction with software				
Pre-Test Speed / Distance	Ability to set quick positioning markers for sample throughput efficiency				
Data Channels	Filtered Force at 27 bit, Distance at 32 bit, Unfiltered Force at 27 bit. Two linear analogue inputs: +/- 4.5v @ 16 bit or PT100 temperature probe inputs (range -50°C to +250°C).				
	Bi-phase digital encoder input at 16 bit suitable for any compatible linear or rotary extensometer				
Filtered Force	24 bit ADC oversampled at 16000 samples per second and digitally filtered to 2000 samples per second.				
	10Hz, 40Hz and 100Hz data filters are implemented digitally for enhanced stability and repeatability				
External Instrumentation Channels	Four channels of RS485 for the simultaneous collection of additional data. Each channel logs at one sample per second and is suitable for external sensing of e.g. temperature, humidity, etc. and is suitable for external sensing of e.g. temperature, humidity, etc.				
Touchscreen Interface	Provides stand-alone operation option for all instruments.				
PC Interface	Interface to PC through a standard USB port or Ethernet				
Ethernet Interface	For Web Browser interface or PC Software connection. Supports the following protocols over TCP/IP: DHCP client, LLMNR server, HTTP server, DNS client, SNTP client and WEB Sockets				
Firmware Updates	Field updates can be transferred via PC Software, Web Interface or USB stick				
Overload Protection	Automatic overload protection for operator safety and load cell protection. Data safeguarded in the event of overload				
Operating Environment	0°C – 40°C. Samples can be tested and controlled (with use of optional equipment) from –50°C to +250°C. Laboratory conditions. Dust and splash resistant				
Power Supply	Universal mains input voltage (single phase)				
Attachments included	A 100mm probe adapter is included for probe/fixture attachment				
Attachment Options	Unrivalled range of probes and fixtures for sample testing. Design facility to manufacture bespoke probes and fixtures				

PC SPECIFICATION FOR SOFTWARE	Minimum	Recommended
CPU (Modern Intel Multicore CPU)	1.2GHz	2GHz
RAM	4GB	8GB
Display resolution	1024 x 768	1920 x 1080
Hard disk space for installation	1GB – No Videos installed	5GB (25GB if videos installed)
USB	*Optional 1 x USB 2.0 port	*Optional 1 x USB 2.0 port
Ethernet TCP/IP LAN access	*Optional 10/100 Mb/s RJ45 connection	*Optional 10/100 Mb/s RJ45 connection
Mouse	Required	Required
Printer	Optional	Optional
Operating System	Windows 10	Windows 10 or 11
*1 of these is required		