

# Vector Extensometer U70

#### Single variable gage length measurement

From 10-50mm gage length, dependent on elongation % within 70mm FOV



- Non contacting with digital placement of specimen gage marks supporting an automated process.
- 0.5 μm resolution (1.9685039e-5 inch), ISO 9513 Class 0.5 and ASTM E83 Class B1 capable.
- Various marking options available, material dependent. Rings, speckles.
- Output data available in analog formats.

## Specifications



Field of View:	Fixed 70H x 25W x 40D[mm] cuboid
Real-Time Data Rate:	$\leq$ 150Hz, platform dependent. Full system from acquisition to output
Strain Outputs:	Analog Output: $\pm 10V$ , short-protected, selectable units and range; includes $3m$ (10ft) shielded output cable
Resolution:	$<0.5~\mu m$ quasistatic, and cyclic; Typical RMS resolution at typical settings. Resolution is a function of the marking data rate and filter settings
Extensometer Accuracy Class:	ISO 9513 Class 0,5 and ASTM E83 Class B-1 capable
Minimum Specimen Width/Diameter:	2mm wide flat or 2.5mm diameter round, excluding marking accessories
Gage Length:	10-50mm
Maximum Tracking Speed:	>2500mm/min
Cyclic Testing:	Speed and specimen dependent
Strain Control:	Suitable for monotonic and cyclic strain control applications
Out-of-Plane Sensitivity:	Out-of-plane boundary = 280 to 320mm from front of module
Ambient Operating Light Conditions:	Suitable for use in a day light situation, artificial lab or room lighting situations
Suitable for use with Temperature Chambers:	Measuring strain in a temperature chamber at ambient, high and low temperature (min. window width 170mm)
Signals Integration Options:	Control, information, and notification through client interface and or test suite software. Manufacturer dependent
Power Supply:	100-240 VAC, 50-60 Hz, 1.4A 120W max, IEC 320 C14 receptacle.
Power Consumption:	8W (avg)
Recycling Capability:	Up to 60% of this product can be recycled; metals and cabling
System Environment:	10° to 40°C (50 to 100°F), for use and storage; 20-80% relative humidity non- condensing environments
Dimensions:	252H x 201W x 73D mm
Mechanical Integration Options:	<b>Physical mounting schemes available for;</b> T slot single and twin column vertical testing machine frames. Multi-column vertical testing machine frames. Horizontal testing machine frames.
Typical ROI:	6 months
Component defect warranty:	12 months [extended warranty available, please inquire]
Manufactured:	In the UK

### TO order numbers

99-993-0004/A0:	Vector Extensometer - Axial g/l from 10-50mm in 70mm FOV incl. T-Bracket & Arm
99-993-9920/00:	Vector mounting bracket split collar clamps round column mount
99-993-9999/00:	Vector Extensometer Analogue Input Signal Conditioner for ST/SL Series



#### www.tiniusolsen.com

Horsham, PA, USA
Redhill, Surrey, UK
Noida, UP, India
Shanghai, PR China