



The first name in materials testing

# VectorExtensometer

Single variable gage length measurement

From 25-180mm gage length, dependent on elongation % within 200mm FOV



- Non contacting with digital placement of specimen gage marks supporting an automated process.
- 0.5  $\mu\text{m}$  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 200H x 40W x 100D[mm] cuboid
Real-Time Data Rate:	≥ 100 Hz, platform dependent. Full system from acquisition to output
Strain Outputs:	Analog Output: ±10V, short-protected, selectable units and range; includes 3m (10ft) shielded output cable
Resolution:	<0.5 μm quasistatic, and cyclic; <i>Typical RMS resolution at typical settings</i> . 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 typical at ≥25mm gage length capable
Minimum Specimen Width/Diameter:	5mm wide flat or 6mm diameter, excluding marking accessories
Gage Length:	Variable, 25mm minimum
Maximum Strain:	Variable: Typically >500% using a 25mm gage length
Cyclic Testing:	Speed and specimen dependent
Strain Control:	Suitable for monotonic and cyclic strain control applications
Out-of-Plane Sensitivity:	Out-of-plane boundary = 300mm ±50mm 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:	10-40°C (50-100°F), for use and storage; 20-80% relative humidity non-condensing environments
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

99-993-0000/A0:	Vector Extensometer - Axial g/l from 25-180mm in 200mm 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

# Tinius Olsen



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