

# Digital Tape Extensometer

A portable device used for measuring displacement between reference anchors fixed to an excavation or structure



# Digital Tape Extensometer



## Overview



The Digital Tape Extensometer is a portable device used for measuring displacement between reference anchors fixed to an excavation or structure.

The instrument consists of a precision punched steel tape incorporating a repeatable tensioning system and dial gauge readout. The tape winds onto a reel, which incorporates a tape tensioning device and a digital LCD readout.

The body of the extensometer has a hook connector that connects to the first eyebolt. An identical hook on the free end of the tape connects to the opposing eye bolt. The user then tensions the instrument and records the readings from the digital LCD display. The measurements are not absolute, but relative to the previous measurement. This provides an accurate record of displacement over time.

These can be installed on a structure or in an excavation such as a tunnel or shaft.

Also available, pictured right - Aluminium reference bar with a known distance between two fixed points.  
1150mm(L),126mm(H),76.2mm(W)

## APPLICATIONS

The measurement of soil and rock movements including:

Radial movement and convergence of tunnels and shafts

Displacements of retaining walls and abutments

Control of natural and cut slopes, quarry and mining excavations

Monitoring of deformation of embankment dam crests

## FEATURES

Accurate & robust

Heavy duty, suitable for burial in rock-fill

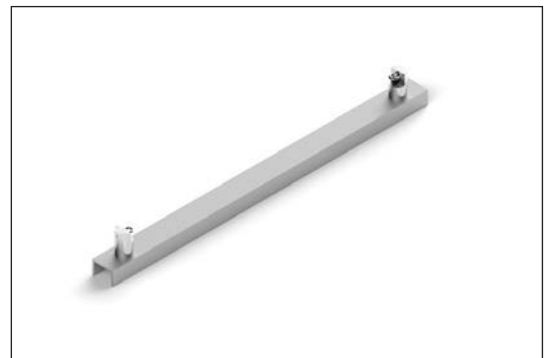
Easy one-man operation

Stainless Steel measuring tape

Digital LCD readout

Measuring range up to 30m

Optical tension indicator



# Digital Tape Extensometer

## Specifications

### DIGITAL TAPE EXTENSOMETER

Range	20m, 30m
Accuracy <sup>1</sup>	±0.01mm
Resolution	0.01mm
Repeatability <sup>2</sup>	0.1mm
Operating Temperature	-10 to 60°C
Tape Tension	13.5kg
Tension Indicator	Optical
Weight Excluding Tape	1kg

### TAPES

Lengths	20m, 30m
Weight	410g, 610g
Material	Stainless Steel
Hole Pitch	25mm

Replacement tapes available

### GROUTABLE EYEBOLT ANCHORS 16MM DIAMETER

Rebar Length	100mm, 250mm
Eye Bolt Material	Stainless Steel
Rebar Material	Zinc Plated Carbon Steel
Weight	170g, 407g

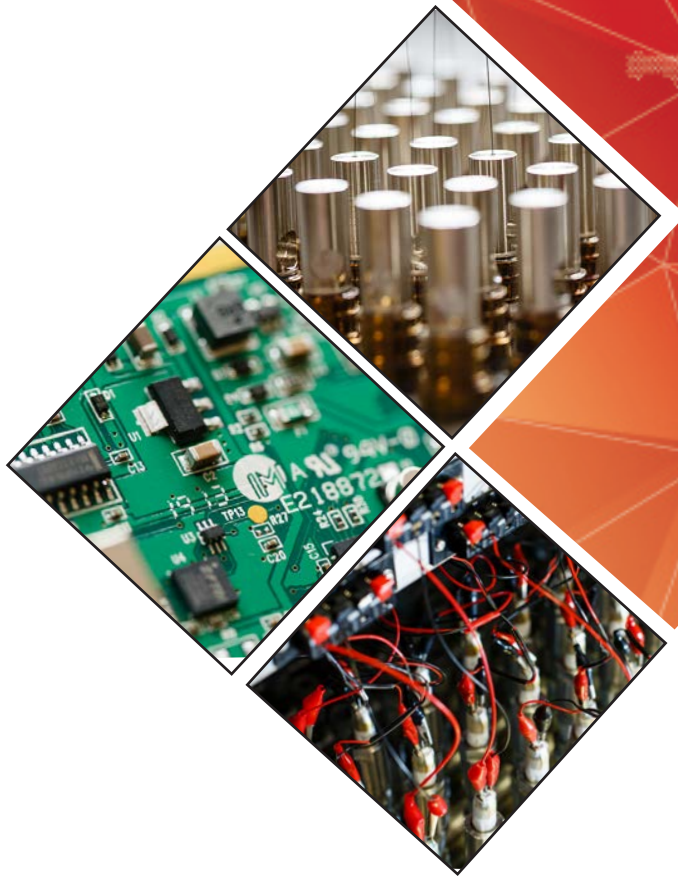
### THREADED EYE BOLTS

Material	Stainless Steel
Thread Size	M6 x 1 Pitch
Weight	12g

### REFERENCE BAR

Dimensions	1200 x 80 x 130mm
Weight	3.5kg

<sup>1</sup>Accuracy of the micrometer <sup>2</sup>Dependent on operator experience



Geosense Ltd, Nova House, Rougham Industrial Estate, Rougham, Bury St Edmunds, Suffolk IP30 9ND, England

[www.geosense.co.uk](http://www.geosense.co.uk) e [sales@geosense.co.uk](mailto:sales@geosense.co.uk) t +44(0)1359 270457