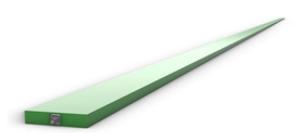


SECTA TSS2D

FSI fiber optic sensor for real-time 2D shape sensing of parts and structural elements



Technical features

- Max Sampling frequency: 205 kHz
- Accuracy: 0.1 % (max error 1 mm over 1 m)
- Available lenght: multiples of 1m and 5m
- EMI Immunity

SECTA SS2D

SECTA SS2D is a FSI – Fiber Segment Interferometry optical sensor developed with a fiber glass transducer dedicated to monitor the shape variation of a structural element.

TSS2D is the sensor model type specifically designed for dynamic monitoring of tunnel lining sections; TSS2D is manufactured with a standard 5 mt length. By combining one or more TSS2D it is possible to cover the length of every tunnel sections parrallel to YZ transversal plane.

Installazion

SS2D sensors are easily installable with anchor sleeves for concrete structures and protected with special designed elements made in composite material.

SS2D sensors are connected through APC/FC and dedicated junction box to the main optical fiber backbone which connects all the sensors to SECTA Control Unit PCU – GEN I.