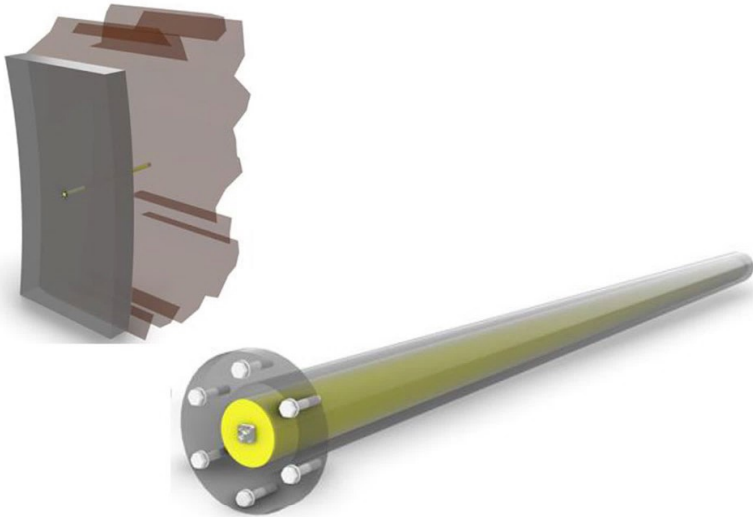




FSI optical 3D shape sensor used to monitor the deformations of the rock mass surrounding a tunnel.

### Technical feature

- Max Sampling Frequency: 205 kHz
- Accuracy : 0.1 % ( max error 1 mm on 1 m lenght)
- Lenght: on request
- EMI immunity
- ATEX compatibility



## SECTA RMS3D

RMS3D FSI optical sensor is a device used to detect the deformations of the rock mass surrounding a tunnel and define entity and direction, by measuring the 3D shape variation of the FSI optical sensors across the longitudinal axis of the transducer made in composite material.

### Installation

RMS3D sensor is inserted inside a 40 mm diameter blind hole along the radial cross-section of the tunnel to be monitored.

RMS3D 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.