

Robust Fiber Bragg Grating based short gauge strain sensor with 100mm measuring base (gauge length). Developed specifically for measurements of strain in rebars in concrete constructions. Can also be used in numerous other applications.

Measures strain between its anchoring brackets in  $\mu\epsilon$  or  $\mu m$ .

- For embedding in concrete and surface mounting
- Double ended
- Adjustable pre-strain during installation
- Measurement range up to 10000 $\mu\epsilon$



Example of SC 100 NT sensor

Performance	Parameter
Sensitivity	1.2pm/ $\mu\epsilon$ (12pm/ $\mu m$ )
Measurement range	$\pm 5000\mu\epsilon$
Accuracy	<0.50% Full Scale (5 $\mu m$ /100mm)
Precision	<0.25% Full Scale (2.5 $\mu m$ /100mm)
Operational temperature range	-20 to +60 °C
Weight without cables	100g
Material	SS 304
Anchoring distance	$\pm 100$ mm
Protection	IP 67
FWHM	< 0.3 nm
Reflectivity	40 %
Insertion loss	< 0.1 dB
FBGs	1
Cable length <sup>1</sup>	1m
Connector options	FC/APC, LC/APC, open end

<sup>1</sup> Other cable length on request.

## Mounting instructions

Sensor can be mounted on the rebars using anchoring brackets, or surface mounted with brackets. (standard anchoring brackets are available on request).

