

**Specifications for FBG Interrogator (Quantity-01) and Long Gauge FBG Deformation Sensor (12 Nos)**

<b>Specifications for FBG Interrogator (Quantity-01)</b>		
1	Sampling Rate	1000 samples/s (all channels simultaneously) or better
2	Wavelength Range	Min. 100 nm (1500 to 1600 nm)
3	Measurement Type	Static and Dynamic
4	Measurement resolution	5 pm or better
5	Source	Light source should be integrated
6	Available channels	8 (Min.)
7	Optical Connectors:	Suitable to Sensors
8	External connections:	Ethernet connection/ USB port
9	Operating temperature	Min. (0°C to + 40°C )
10	Supporting Sensors type	FBG Strain (Short and Long Gauge) Temp, Accelerometers, tilt meter
11	PC type	Interrogator (preferably with inbuilt PC and display). <ul style="list-style-type: none"> <li>• If quoted for inbuilt PC, it should also be capable to bypass the inbuilt PC and can work on laptop/PC with necessary compatible software</li> <li>• Without inbuilt PC, a compatible laptop for running Integrator and related software smoothly</li> </ul>
12	Software	Capable of Data management, visualization and processing
13	Input voltage	230 V 50 Hz
14	Manufactures Support	Installation and Training at the site (CBRI Roorkee, India)
15	Warranty	Min. Two Years Warranty
Optional	Enclosure	A compact housing IP65 or better for the reading unit
<b>Long Gauge FBG Deformation Sensor (12 Nos)</b> (Two sets, each set consists of 6 Nos. of sensors connected with passive cable)		
S. No.	<b>Specifications</b>	
1	Active Gauge Length	1 meter
2	Measurement range	±5,000 $\mu\epsilon$

3	Measurement resolution/ sensitivity	1.2 pm/ $\mu\epsilon$ or better
4	Accuracy	2 $\mu\epsilon$ (Min.)
5	Measurement Type	Static and Dynamic
6	Wavelength	Unique in between 1500nm to 1600nm
7	Set of sensor series including passive cable and connectors	<ul style="list-style-type: none"> <li>Total two sets, each set consists of 6 Nos. of sensors connected in series with passive cables, passive cable length between two sensors is 4m and additional 20m passive cable for connecting the integrator with sensor series.</li> </ul>
8	Temperature compensated	Extrinsic Temperature Compensated
9	Connectors	Compatible to Integrator
10	Mounting	Surface Mounting
11	Operating temperature	Min. (0 to 60 °C)
12	Corrosion and Vibration	Insensitive to corrosion and vibrations
13	Installation	Using clamp and bolt on the removable basis
14	Support from distributor	Installation and Training at the site
15	Warranty	Min. Two Years Warranty

Note : The FBG sensors and the Integrator are to be compatible to each other.