

iFBG (Fiber Bragg Grating Temperature Sensor System)

OVERVIEW

A cost-effective FBG (Fiber Bragg Grating) interrogation system that includes a tunable laser diode, 6 photodiodes, and several fiber-optic couplers has been developed with a very simple configuration. In addition to temperature measurement, complex measurements can be done using strain and pressure sensors. According to the application needs the type of sensors can be selected. Moreover, time-varying measurement data trends as well as spectra of FBGs can be observed through the front display.



SPECIFICATIONS

Optical Properties		
Wavelength Range	< 5 nm	
Temperature Range	-20 to 120 °C	Depend on Coating Material
Temperature Resolution	0.1 °C	
Temperature Accuracy	±1 °C	Depend on Data Average
Max. Sampling Rate	3sec	
Number of FBG	6 Sensors	Max. 7 Sensors
Mechanical Properties		
Connector type	LC/APC Depends on user's requirement	
User Interface	RS-485	
Dimensions	225mm(W) x 180mm(D) x 150mm(H)	
Operating Temperature	0 to 50 °C	