

SSH-100 Fiber Bragg Grating Impact Hammer

Aniber's SSH-100 Fiber Bragg Grating (FBG) Impact Hammer is specially designed to excite and measure impact forces on small to medium structures based on a FBG sensor embedded in the head of the hammer. The force excited on the structure can be precisely measured by the wavelength shift of the FBG. This hammer is also suitable for measuring of frequency response functions using the impact excitation techniques. Standard measurement range of SSH-100 is 0 – 100 N, with the FBG center wavelength of 815 – 875 nm and 1510 – 1590 nm.



Key Features

- Two Types of Hammer Head for Different Sensitivity
- Wide Temperature Operational Range
- Provide Effective Portable Excitation Force
- Custom Measurement Range Available

Other sensors for

- Inclination
- Temperature
- Vibration
- Displacement
- Strain

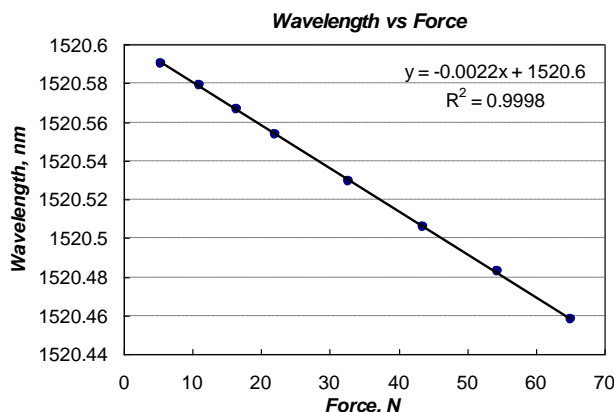
Measurements are available

PLEASE CONTACT ANIBER FOR SPECIFICATIONS!

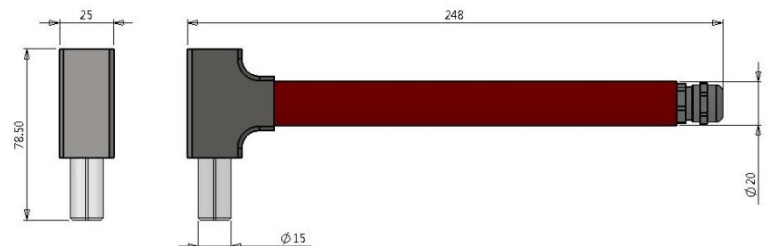
SPECIFICATIONS

PERFORMANCE PROPERTIES		
Operation Wavelength	815 – 875 nm	1510 – 1590 nm
Sensitivity	1 pm/N typical	2.2 pm/N typical
Measurement Range	0 – 100 N	
Resolution ¹	1 N	
Operation Frequency	DC – 1000 Hz	
Maximum Operation Shock	200 N	
Operation Temperature	-20 °C – 100 °C	
PHYSICAL PROPERTIES		
Weight	1.2 Kg	
Hammer Head Material	Acrylic/Aluminum	
OPTICAL PROPERTIES		
FBG Center Wavelength	815 – 875 nm (+/-0.5 nm)	1510 – 1590 nm (+/-0.5)
FBG Peak Reflectivity	>70 %	
FBG FWHM (-3 dB)	0.25 nm (+/- 0.05 nm)	
FBG Isolation ¹	>15 dB	
Optical Fiber Type	HI780 compatible	SMF-28e compatible
Cable Length & Type	2 meter (other on request) & 3 mm armored cable	
Optical Connector	FC/APC (others on request)	

TYPICAL PERFORMANCE



DIMENSIONS



Specifications are subjected to change with a view to enhance system performance without prior notice.
 Design and specifications can be customized to suit a range of customer requirements.

