

INTERROGATION MONITORS FBG

DINAMIC PROCESSES UP TO 8 KHZ

FBG interrogation unit FIU - 44 - 1.55 – 20 – x – A8 up to 8 kHz provides registration of optical signals from unified sensor heads based on Fiber Bragg Gratings (FBGs) with a sampling frequency up to 8 kHz per second for one channel.

Built-in full-featured software allows you to measure vibration displacement, velocity and acceleration of fiber accelerometer and visualize processed data in real time.

FIU-based flexible multipurpose telemetry system can be constructed by using various sensor head types, such as an: temperature, strain, displacement, inclinometer, vibration (acceleration).



INTERROGATIONS SPECIFICATION	FIU-44-1.55-20-S-A8-IP40	FIU-44-1.55-20-Er-A8-IP40
Spectral width of an optical channel, nm	1525 ÷ 1575	
Polarization state of the light source	partially polarized	depolarized
The number of optical channels	4 / 8 / 16*	
The number of sensors per channel	8	
Range of intensities of the registered optical signals, dBm	-80 ÷ -20	
Dynamic range, dB	15	
Total optical power light source, dBm	0**	
Sampling frequency for one channel, kHz	< 8	
Processing time and outputting data of one channel, sec	1	
Software	full-featured software URM_Control	
Output interfaces	USB 2.0, USB 3.0, Ethernet RJ45, SVGA, DVI-I, HDMI	
Power consumption, W	< 250	
Protection class IEC 60529	IP40	
Working temperature range, °C	+10 ÷ +40	
Humidity, % (no condensation)	< 80	
Power supply, V/Hz	220/50	

* - each channel of the module can be divided into 2/4/8/16 optical lines upon request

** - on request