

# Specifications NBX-S4100

Function	Property					
General Function	Optical Fiber Distributed Acoustic Acquisition System、TGD-OFDR					
Laser wavelength	1550 ± 2 nm (Linewidth < 0.1kHz)					
Interrogation Range	120 km					
Finest Spatial Resolution	1.0 m					
Spatial Sampling Interval	0.2 m					
Gauge Length	0.2 m ~ 50 m					
Number of Sampling points	650,000 (maximum)					
Interrogation Rate	500 Sps ~ 20 kSps (Real time data process)					
Frequency Range	0.1 Hz ~ 10 kHz					
Chirp Pulse width	2 microseconds					
Spatial Resolution	1m	2m	5m	10m	20m	50m
Distance Dynamic Range	16.0dB	20.0dB	23.5dB	24.0dB	25.5dB	27.5dB
Measurable distance <sup>*1</sup>	80km	100km	115km	120km	120km	120km
Output data	Strain rate (με/s)					
Sensitivity <sup>*2</sup>	10 pε/√Hz (@5 kSps, 2m spatial resolution)					
File format	HDF5 or SEGY					
Internal Store	4 TB					
Inbuilt loss analysis	TGD-OFDR					
Input-output fiber	Single mode optical fiber					
Fiber connector	SC/APC (Factory default) , E2000/APC(Factory option)					
Applicable fiber <sup>*3</sup>	Single mode optical fiber / Multi mode optical fiber (GI type)					
Power supply	AC 100 ~ 240 V 50/60 Hz 350 VA					
Laser class	Class 1 (IEC60825-1 : 2001)					
Dimensions / Weight	approx. 450(W) × 685(D) × 295(H) mm / 33 kg					
Operating temperature	10 ~ 40 ° C, Humidity below 85 % (no dew condensation)					
Storage temperature	0 ~ 50 ° C					
Place of production	Japan					

For the detail of Anti-Vibration Bench and other models, please contact us.

\*1 Based on average fiber loss of 0.20 dB/km, output power of +25dBm using single mode fiber (UV-coated).

\*2 Based on the measurement of strain free, UV coated fiber and in constant temperature environment.

\*3 Based on the SMF/MMF conversion cord provided by NEUBREX in MMF measurement.

\* Specifications are subject to change without notice.

## Contact Address

### Neubrex Co., Ltd.

Sakae-machi-dori 1-1-24, Chuo-ku, Kobe, Hyogo 650-0023, Japan  
 Tel: +81-78-335-3510 Fax: +81-78-335-3515

(2024.01.09)

[\*\*www.neubrex.com\*\*](http://www.neubrex.com)