xDAS™ - Distributed Acoustic Sensing System (3rd Gen)

Sensing Capabilities		
Sensing Range[1]	Single Channel: 45 km	Dual Channel: 90 km
Spatial Resolution[2]	1 m – 10 m	
Frequency Range[3]	0.1 Hz – 20 kHz	
Sample Rate	Up to 500 MSa/sec (one sample every 20 cm)	
Strain accuracy	500 pε	
Strain measurement range	500 pε ~ 1 mε	

System Specification	
Operating Wavelength[4]	1530nm - 1560nm
Laser Safety Class	Class 1 / Output power <10mW
Supply Voltage	100 – 240V, 50 – 60 Hz
Optical Interface	FC-APC (alternatives upon request)
External Connectors	USB (6 x USB3.2 Gen2), WLan (802.11ax Wi-Fi) 2 x Ethernet (1ea 2.5Gb/s, 1ea 10Gb/s) Thunderbolt (2x Gen4 Ports), 2 x Display Port, Audio Ports (5x 3.5mm Ports)
Storage	Up to 32 TB SSD
Dimension	Rackmount 4U Chassis H x W x D: 134 mm x 482 mm x 590 mm
Weight	25 kg (Standalone), 57 kg (incl. KMM and Pelican Case)
Power Consumption	120 W typical, 250 W max

- The system offers a real-time data visualisation capability and low-level data analysis.
- Data storage can be carried out in RAID1, RAID5, or RAID10 formats.
- Portable DAS unit with KMM console and ruggedised carry case is also available (Weight: 57kG, Dimension: 222mm x 483mm x 610mm (H x W x D)).

[1] These ranges can be achieved using standard telecom fibre such as SMF-28 or G.652.
[2] Higher spatial resolution can be achieved over a shorter sensing range only.
[3] The frequency range depends on the sensing range. 20kHz frequency can be achieved over <1km sensing range.
[4] The operating wavelength is fixed value between 1530nm ~ 1560nm.