

# SigmaWave Specifications

Parameter	Feature	Value
Environment	Operational Temperature	+5 to +40°C (41 to 104°F)
	Humidity	80% RH for temperatures up to 31°C (87.8°F) non-condensing
Mechanical Hardware	Size without brackets and rear guards (H x W x L)	222 mm (8.75 in) x 540 mm (21.25 in) x 483 mm (19 in) Weight 27.4 kg (57 lbs)
Interfaces	Data Storage	eSATAp Option to install RAID card and connect to a RAID Array
	Storage Volume Communications	Up to 3TB (internal)  Ethernet—minimum 1Mbps required for upstream for data view  4 x USB3 ports (including 2 x USB2 ports on front panel) , 1 x DVI-I port 1 x TIA-232 or RS-232 port 1 x 1 Gigabit Ethernet port (optional 10GigE card for data streaming)
Sensing Cable Length	Maximum length of each interrogated fiber	40km*
Optical	Fiber Type	Single mode / Multi Mode / Enhanced Backscatter (option)
	Tri-Mode Operation (fiber interrogation modes)	Intensity. Bandwidth. Fidelity
	Pulse lengths	4, 5, 10, 20, 50m
	Gauge Length	User Selectable in software
	Spatial sampling	0.67 m
	Rate Interface	1 x E2000 APC optical connector
Energy Consumption	Voltage, frequency	115-230 VAC 50-60 Hz
	Power	480 W (Max.) 330 W (Typical)
Frequency Information	Minimum Frequency Maximum Frequency response	1 Hz* 20 km cable = 2.5 kHz 40 km cable = 1.25 kHz
	Acoustic Bandwidth	Intensity Mode: $PRF/2$ ; Bandwidth Mode: $PRF/2$ Fidelity Mode: $PRF/6$ ( $PRF$ - Pulse Repetition Frequency)
	Harmonic Distortion (Typical level of harmonics present in addition to the fundamental frequency)	Intensity Mode: Helios Standard Bandwidth Mode: Reduced Level Fidelity Mode: Minimal Level

\* Frequencies lower than 1Hz can be acquired when the Helios Theta is supported by a post-acquisition processing module.

IEC60825-1, UL60950-1, CDRH-21CFR1040, FCC, RoHS certified



Parameter	Feature
<b>Acquisition Panel</b>	WaveLab II Acquisition PC for Standalone and Hybrid Acquisition SCIP for Standalone Source Controlled Acquisition SCIP + SCPP for Hybrid Acquisition
<b>Downhole Array Compatibility</b>	GeoWave II, MaxiWave, SlimWave, GeoWaves, Analog
<b>Quality Control Features</b>	Traces Visualisation and Advanced Quality Control Vibroseis Real-Time Correlation and Quality Control Final Plot Generation and Corridor Stack
<b>Data Output</b>	SEG-Y, Real Time, GPS Time Stamp and Synchronisation
<b>Recording</b>	Standard and Continuous
<b>Microseismic Event Detection</b>	Threshold or ratios function methods
<b>Source Control Interface</b>	Fully Integrated Source Management, compatible with any source type
<b>Supply and Voltage &amp; Frequency</b>	85-264 VAC / 110-330VDC, 47-63 Hz
<b>Dimensions (Units can be either packaged in transportation cases or racked)</b>	
<b>SCIP</b>	1 rack 19" 3U 31 kg (68 lbs)
<b>SCPP</b>	1 rack 19" 5U 28 kg (62 lbs)
<b>PC Station and Additional Memory</b>	1 rack 19" 3U 43 kg (95 lbs)

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