

# MicrOBS

	MicrOBS	MicrOBS <sup>NT</sup>	MicrOBS Long Life
<b>SENSORS</b>			
Type	Geophone	Accelerometer Ultra low noise MEMS (DC to 800 Hz)	Geophone
Configuration	3-axis	Omni Tilt 3-axis	3-axis
Low frequency cut-off	4.5 Hz	DC	4.5 Hz
Sensitivity	89.4 V/m/s@4.5 Hz	-	89.4 V/m/s@4.5 Hz
<b>HYDROPHONE</b>			
Low frequency cut-off	2.5 Hz (-3 dB)		
Sensitivity	-160 dB ref 1V/μPa (1000V/Bar)		
<b>AUTONOMY</b>			
Battery type	Rechargeable Li-Ion		Alkaline batteries
Autonomy duration	60 days	45 days	6 months
<b>MEMORY</b>			
Type	64 GByte mSD Card		
Autonomy	60 days (@0,5ms SR)* ; 6 months (@2ms SR)*		
<b>RELEASE</b>			
Acoustic command	8000 m range		
Mechanism	Ballast release through fuse wire		
Operating depth	6000 m maximum		
<b>LOCALIZATION</b>			
VHF	VHF radio beacon: 160,725 MHz		
Flashing light	Light for surface recovery - LED flash		
GPS	Internal GNSS		
Iridium	Iridium module for SBD** messages		

\* Typical compression 50%

\*\* Short Burst Data

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<b>DATA LOGGER</b>			
Seismic channel	4		
A/D converter (seismic channel)	24 bits		
Sampling rate	4, 2, 1, 0.5 ms		
Bandwidth	DC to 0.40 x sampling frequency		
Full scale hydrophone	1.6 V RMS (0 dB), 400 mV RMS (12 dB), 100 mV RMS (24 dB)		
Full scale seismic sensor	1.6 V RMS (0 dB), 400 mV RMS (12 dB), 100 mV RMS (24 dB)	± 5 m/s <sup>2</sup> (510 mg)	1.6 V RMS (0 dB), 400 mV RMS (12 dB), 100 mV RMS (24 dB)
Synchronization interface	GPS PPS and NMEA frame		
Configuration interface	Ethernet 100Base-t - Web based application		
Date & time stamped data	Yes		
Clock accuracy	± 0.2 ppm [-10 °C; 50 °C]	± 10 ppb [-10 °C; 50 °C]	
<b>DIMENSIONS</b>			
Sphere	13"		17"
Base	430 x 430 mm		
Height	600 mm (storage) 826 mm (arch) 1000 mm (flag)		722 mm (storage) 950 mm (arch) 1100 mm (flag)
Dead weight size (cross shape)	700 x 700 mm		800 x 800 mm
<b>WEIGHT</b>			
In AIR			
Seismometer	23 kg		39 kg
Seismometer + dead weight	42 kg		68 kg
In WATER			
Seismometer	-4 kg		-10 kg
Seismometer + dead weight	12 kg		16kg
<b>VELOCITY</b>			
Drop	1 m/s		
Ascend	0,8 m/s		

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