S2CR 18/34D USBL

PRODUCT INFORMATION

Simultaneous positioning and communication

S2C Technology: accurate 3D positioning and reliable data transmissions with up to 13.9 kbit/s

Horizontally omnidirectional beam pattern, optimized for medium range operations

Depth rated device

TECHNICAL SPECIFICATIONS

GENERAL		
OPERATING DEPTH	Titanium	6000 m
OPERATING RANGE		3500 m
FREQUENCY BAND		18 - 34 kHz
TRANSDUCER BEAM PATTERN		horizontally omnidirectional

USBL		
SLANT RANGE ACCURACY [1]		0.01 m
BEARING RESOLUTION		0.1 degrees
NOMINAL SNR		10 dB

CONNECTION		
ACOUSTIC CONNECTION		up to 13.9 kbit/s
BIT ERROR RATE		less than 10^{-10}
INTERNAL DATA BUFFER		1 MB, configurable
HOST INTERFACE [2]		Ethernet, RS-232 (RS-485/422*)
INTERFACE CONNECTOR		up to 2 SubConn® Metal Shell 1500 Series

POWER		
CONSUMPTION	Stand-by Mode	2.5 mW
	Listen Mode [3]	5 - 285 mW
	Receive Mode [4]	less than 1.6 W
	Transmit Mode	2.8 W, 1000 m range
		8 W, 2000 m range
		35 W, 3500 m range
		80 W, max. available
POWER SUPPLY [5]		External 24 VDC (12 VDC*) or internal rechargeable battery*

PHYSICAL		
DIMENSIONS	Housing/USBL sensor	Ø 113 mm x 208 mm / Ø 130 mm x 145 mm
	Total length	353 mm
WEIGHT dry/wet	Titanium	9830 / 4830 g

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APPLICATIONS

Positioning, navigation and communication for deep-water AUVs and ROVs

Underwater acoustic sensor networks

CONFIGURATION OPTIONS

HOUSING	TITANIUM	Corrosion resistant, suitable for long-term deployments in harsh environments, depth rating 6000 m	
INTERFACE	1 CONNECTOR	RS-232 [1] or	
		Ethernet	
	2 CONNECTORS	RS-232 + RS-232 or	
		RS-232 + Ethernet	
MODULES	WAKE-UP MODULE [2]	RS-232 interface	✓
		Ethernet interface	✗
		RS-232 + RS-232 interface	✓
		RS-232 + Ethernet interface	✗
	ROLL, PITCH, HEADING [3]	internal AHRS, Xsens® MTx	

[1] One RS-232 Interface can be replaced with either RS-485 or RS-422 interface. More interface configurations available by special request. Contact EvoLogics for more information.
[2] The Wake Up Module turns the rest of the device on if it detects incoming acoustic signals or incoming data on the host interface. Once the device completes receiving or transmitting data, it switches itself off.
[3] Power consumption increases by 400 mW with an AHRS installed.