LIMITED EDITION

S2CR 18/34D USBL

PRODUCT INFORMATION



TECHNICAL SPECIFICATIONS

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

USBL GENERAL	OPERATING DEPTH	Titanium	6000 m			
	OPERATING RANG	ε	3500 m			
	FREQUENCY BAND		18 - 34 kHz			
	TRANSDUCER BEAM PATTERN		horizontally omnidirectional			
	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*)			
POWER	INTERFACE CONNECTOR		up to 2 SubConn® Metal Shell 1500 Series			
	CONSUMPTION	Stand-by Mode	2.5 mW			
		Listen Mode 3)	5 - 285 mW			
		Receive Mode 4)	less than 1.6W			
		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	Ø113 mm x208 mm /Ø130 mm x145 mm			
		Total length	353 mm			
F	WEIGHT dry/wet	Titanium	9830/4830 g			

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optional
¹⁹ Slant range estimation is based on the measured time delay, slant range accuracy depends on sound velocity profile, refraction and signal-to-noise ratio.
²⁹ See the Configuration Options for available standard interface combinations.
²⁰ User configuration Options for available standard interface combinations.
²¹ User configuration options for available standard interface combinations.
²² User configuration options for available standard interface combinations.
²³ User configuration options for available standard interface combinations.
²⁴ User configuration in Listen Mode is only available with a Wake-Up module installed. Power consumption in Listen Mode depends on Listen Mode settings.
²⁵ Power consumption for the RS-232 interface option. Add 600 mW for the Ethernet interface option.
²⁶ Contact Evologics for more information on power supply options.

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SBL POSITIONING AND COMMUNICATION SYSTEM



S2CR 18/34D USBL

PRODUCT INFORMATION

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 hars depth rating 6000 m	sh environments,
INTERFACE	1 CONNECTOR	RS-232 ¹⁾ or	
		Ethernet	
	2 CONNECTORS	RS-232 + RS-232 or	
		RS-232 + Ethernet	
		RS-232 interface	\checkmark
MODULES	VVARE-UP MODULE		v
		Ethernet interface	×
		RS-232 + RS-232 interface	\checkmark
		RS-232 + Ethernet interface	×
	ROLL, PITCH, HEADING ³⁾	internal AHRS, Xsens® MTx	

¹¹ 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. ²¹ 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. ²¹ Power consumption increases by 400 mW with an AHRS installed.

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