

# S2CR 18/34H

PRODUCT INFORMATION



**S2C Technology**: fast and reliable data transmissions with up to 13.9 kbit/s

Advanced data delivery protocol

Hemispherical beam pattern, optimized for medium range transmissions in vertical and slant channels

#### **TECHNICAL SPECIFICATIONS**

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	OPERATING DEPTH	Delrin	200 m			
CONNECTION GENERAL		Aluminium Alloy	1000 m			
	Stainless Steel		2000 m			
		Titanium	2000 m			
	OPERATING RANGE		3000 m			
	FREQUENCY BAND		18 - 34 kHz			
	TRANSDUCER BEAM PATTERN		hemispherical			
	ACOUSTIC CONNECTION		up to 13.9 kbit/s			
	BIT ERROR RATE		less than $10^{-10}$			
	INTERNAL DATA BUFFER		1 MB, configurable			
	HOST INTERFACE 1)		Ethernet, RS-232 (422*)			
ŏ	INTERFACE CONNECTOR		up to 2 SubConn® Metal Shell 1500 Series			
	CONSUMPTION	Stand-by Mode	2.5 mW			
		Listen Mode <sup>2)</sup>	5 - 285 mVV			
		Receive Mode 3)	0.8W			
POWER	Transmit Mode		2.8 W, 1000 m range			
ò			8 W, 2000 m range			
_			35 W, 3500 m range			
			65 W, max. available			
	POWER SUPPLY <sup>4)</sup>		External 24 VDC (12 VDC*) or internal rechargeable battery*			
	DIMENSIONS 5)	Housing	Ø110 mm ×218 mm			
		Total length	300 mm			
PHYSICAL	WEIGHT dry/wet	Delrin	3100/500* g			
		Aluminium Alloy*	2170/1470 g			
	Stainless Steel*		9800/5800 g			
		Titanium*	6500/4500 g			

Specifications subject to change without notice. © Evologics GmbH - August 2018

<sup>\*</sup> optional

1) See the Configuration Options for available standard interface combinations.

2) Userconfigurable Listen Mode is only available with a Wake-Up module installed. Power consumption in Listen Mode depends on Listen Mode settings.

3) Power consumption for the RS-232 interface option. Add 500 mW for the Ethernet interface option. Add 0.3 W for Wake-Up Module.

4) Contact Evologics for more information on power supply options.

3) Dimensions of a Delrin housing, other builds are slightly larger. Marked\* weights are estimates.



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### **APPLICATIONS**

High-speed communication in adverse conditions

Communication link for AUVs and ROVs

Underwater acoustic sensor networks

## **CONFIGURATION OPTIONS**

HOUSING	DELRIN	Plastic non-magnetic corrosion-resistant housing for short-term deployments, depth rating 200 m				
	ALUMINIUM ALLOY	Light metal housing for short-term deployments, depth rating 1000 m				
	STAINLESS STEEL	Robust metal, suitable for long-term deployments in harsh environments, depth rating 2000 m				
	TITANIUM	Corrosion resistant, suitable for long-term deployments in harsh environments, depth rating 6000 m				
INTERFACE	1 CONNECTOR	RS-232 <sup>1)</sup> or				
		Ethernet				
	2 CONNECTORS	RS-232 + RS-232 or				
		RS-232 + Ethernet				
MODULES	WAKE-UP MODULE 2)	RS-232 interface	✓			
		Ethernet interface	x			
		RS-232 + RS-232 interface	✓			
>		RS-232 + Ethernet interface	×			

#### **OPERATING CONDITIONS**

g 0°C - +60°C
-4°C - +60°C
20g, 11 ms half sine
frequency range 5-150 Hz, 5-25 Hz: ±2mm; 25-50 Hz: 5g

<sup>11</sup> One RS-232 Interface can be replaced with a 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.