

## S2CR 18/34

### PRODUCT INFORMATION



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

Advanced data delivery protocol

Horizontally omnidirectional beam pattern, optimized for medium range transmissions in reverberant shallow waters

#### TECHNICAL SPECIFICATIONS

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	OPERATING DEPTH	Delrin	200 m			
GENERAL		Aluminium Alloy	1000 m			
		Stainless Steel	2000 m			
		Titanium	2000 m			
	OPERATING RANGE		3500 m			
	FREQUENCY BAND		18 - 34 kHz			
	TRANSDUCER BEAM PATTERN		horizontally omnidirectional			
CONNECTION	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 (RS-485/422*)			
	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)	less than 1.3 W			
POWER		Transmit Mode	2.8 W, 1000 m range			
ò			8 W, 2000 m range			
			35 W, 3500 m range			
			80 W, max. available			
	POWER SUPPLY <sup>4)</sup>		External 24 VDC (12 VDC*) or internal rechargeable battery*			
	DIMENSIONS 5)	Housing	Ø 110 mm × 170 mm			
<b>-</b>		Total length	265 mm			
CA	WEIGHT dry/wet	Delrin	2445/400 g			
PHYSICAL		Aluminium Alloy	2170/1470 g			
Δ.		Stainless Steel	9800/5800 g			
		Titanium	6500/4500 g			

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<sup>\*</sup> optional

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

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

3) Power consumption for the RS-232 interface option. Add 600 mW for the Ethernet interface option.

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

3) Dimensions of a Delrin housing, other builds are slightly larger.



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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 depth rating 200 m	deployments,
	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 had depth rating 6000 m	rsh environments,
INTERFACE	1 CONNECTOR	RS-232 <sup>1)</sup> or	
		Ethernet	
	2 CONNECTORS	RS-232 + RS-232 or	
		RS-232 + Ethernet	
MODULES	WAKE-UP MODULE <sup>2)</sup>	RS-232 interface	$\checkmark$
		Ethernet interface	x
		RS-232 + RS-232 interface	✓
		RS-232 + Ethernet interface	×

<sup>11</sup> 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.