

# S2CR 12/24

### PRODUCT INFORMATION



**S2C Technology**: reliable data transmissions with up to 9.2 kbit/s

Advanced data delivery protocol

Directional beam pattern, optimized for vertical and slant channels

Depth rated device with low power consumption ideal for long-term deployment

### TECHNICAL SPECIFICATIONS

'	rechnical specifications				
	OPERATING DEPTH	Delrin	200 m		
CONNECTION GENERAL		Aluminium Alloy	1000 m		
	Stainless Steel		2000 m		
		Titanium	6000 m		
	OPERATING RANGE		6000 m		
	FREQUENCY BAND		13 - 24 kHz		
	TRANSDUCER BEAM PATTERN		directional, 70 degrees		
	ACOUSTIC CONNECTION		up to 9.2 kbit/s		
	BIT ERROR RATE		less than $10^{10}$		
	INTERNAL DATA BUFFER		1 MB, configurable		
	HOST INTERFACE 1)		Ethernet, RS-232 (RS-485/422*)		
Ö	Interface connector		up to 2 SubConn® Metal Shell 1500 Series		
	CONSUMPTION	Stand-by Mode	2.5 mW		
		Listen Mode <sup>2)</sup>	5 - 285 mW		
		Receive Mode 3)	less than 1.1 W		
POWER		Transmit Mode	2.5 W, 1500 m range		
ò			5 W, 3000 m range		
			15 W, 6000 m range		
			40 W, max. available		
	POWER SUPPLY <sup>4)</sup>		External 24 VDC (12 VDC*) or internal rechargeable battery*		
	DIMENSIONS 5)	Housing	Ø 113 mm ×220 mm		
ᆛ		Total length	390 mm		
PHYSICAL	WEIGHT dry/wet	Delrin	2990/490 g		
HYS		Aluminium Alloy	4160/1560 g		
۵.		Stainless Steel	8000/5800 g		
		Titanium	7780/5180 g		

<sup>\*</sup> optional

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

2) User-configurable 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 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**

Reliable long-range communication

Communication link for deep-sea AUVs and ROVs

Seafloor observatories

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	$\checkmark$
2		RS-232 + Ethernet interface	×

### **OPERATING CONDITIONS**

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

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<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.

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.