

S2CR 15/27

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

ı	TECHNICAL SPECIFICATIONS					
	OPERATING DEPTH	Delrin	200 m			
GENERAL		Aluminium Alloy	1000 m			
		Stainless Steel	2000 m			
		Titanium	6000 m			
	OPERATING RANGE		6000 m			
	FREQUENCY BAND		15 - 27 kHz			
	TRANSDUCER BEAM PATTERN		wide-angle, 120 degrees			
CONNECTION	ACOUSTIC CONNECTION		up to 9.2 kbit/s			
	BIT ERROR RATE		less than 10^{-10}			
	INTERNAL DATA BUFFER		1 MB, configurable			
Z	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 ²⁾	5 - 285 mVV			
		Receive Mode 3)	0.8 W			
POWER		Transmit Mode	2.5 W, 1500 m range			
Ó			5 W, 3000 m range			
			15 W, 6000 m range			
			65 W, max. available			
	POWER SUPPLY ⁴⁾		External 24 VDC (12 VDC*) or internal rechargeable battery*			
	DIMENSIONS 5)	Housing	Ø 113 mm ×220 mm			
		Total length	390 mm			
PHYSICAL	WEIGHT dry/wet	Delrin	2990/490 g			
HYS		Aluminium Alloy	4160/1560 g			
Δ.		Stainless Steel	8000/5800 g			
		Titanium	7780/5180 g			

Specifications subject to change without notice. © Evologics GmbH - December 2016

^{*} 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 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.



S2CR 15/27

PRODUCT INFORMATION

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 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 endepth rating 2000 m	vironments,		
	TITANIUM	Corrosion resistant, suitable for long-term deployments in had depth rating 6000 m	rsh environments,		
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	\checkmark		
		Ethernet interface	×		
		RS-232 + RS-232 interface	✓		
		RS-232 + Ethernet interface	×		

OPERATING CONDITIONS

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

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.