

## S2CR 42/65

### PRODUCT INFORMATION



S2C Technology: reliable high-speed data transmissions with up to 31.2 kbit/s

Advanced data delivery protocol

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

### TECHNICAL SPECIFICATIONS

'	TECHNICAL SPECIFICATIONS					
	OPERATING DEPTH	Delrin	500 m			
	Aluminium Alloy		1000 m			
¥	Stainless Steel		2000 m			
GENERAL		Titanium	2000 m			
GE	OPERATING RANG	E	1000 m			
	FREQUENCY BAND		42- 65 kHz			
	TRANSDUCER BEAM PATTERN		wide-angle, 100 degrees			
Z	ACOUSTIC CONNECTION		up to 31.2 kbit/s			
CONNECTION	BIT ERROR RATE		less than $10^{10}$			
	INTERNAL DATA BUFFER		1 MB, configurable			
Z	HOST INTERFACE 1)		Ethernet, RS-232 (RS-485/422*)			
$\mathcal{S}$	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			
VER	Transmit Mode		5.5 W, 250 m range			
POWER			8 W, 500 m range			
			18 W, 1000 m range			
			60 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			
		Total length	265 mm			
PHYSICAL	WEIGHT dry/wet	Delrin	2300/300 g			
HYS		Aluminium Alloy	2100/1400 g			
Δ.		Stainless Steel	8000/5800 g			
		Titanium	6500/4500 g			

<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

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  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  1 CONNECTOR  RS-232 in or Ethernet  2 CONNECTORS  RS-232 + RS-232 or RS-232 + Ethernet  WAKE-UP MODULE 2)  RS-232 + RS-232 interface  x  RS-232 + Ethernet interface  x						
ALUMINIUM ALLOY  depth rating 1000 m  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  1 CONNECTOR  RS-232 interface  Ethernet  WAKE-UP MODULE 2)  RS-232 + RS-232 interface  Ethernet interface  RS-232 + RS-232 interface  X  RS-232 + RS-232 interface		DELRIN		deployments,		
TITANIUM  Corrosion resistant, suitable for long-term deployments in harsh environments, depth rating 6000 m  RS-232 <sup>1)</sup> or Ethernet  2 CONNECTORS  RS-232 + RS-232 or RS-232 + Ethernet  WAKE-UP MODULE <sup>2)</sup> RS-232 interface  RS-232 interface  RS-232 + RS-232 interface	HOUSING	ALUMINIUM ALLOY				
TITANIUM   depth rating 6000 m   depth rat		STAINLESS STEEL				
Ethernet		TITANIUM		rsh environments,		
S3232 + Ethernet   S3232 + Et	INTERFACE	1 CONNECTOR	RS-232 <sup>1)</sup> or			
S3232 + Ethernet   S3232 + Et			Ethernet			
S3232 + Ethernet   S3232 + Et		2 CONNECTORS	RS-232 + RS-232 or			
Ethernet interface ×  RS-232 + RS-232 interface ✓			RS-232 + Ethernet			
Ethernet interface x  RS-232 + RS-232 interface   RS-232 + Ethernet interface x	MODULES	WAKE-UP MODULE 2)	RS-232 interface	✓		
RS-232 + RS-232 interface   ✓ RS-232 + Ethernet interface   x			Ethernet interface	×		
RS-232 + Ethernet interface x			RS-232 + RS-232 interface	✓		
			RS-232 + Ethernet interface	×		

### **OPERATING CONDITIONS**

TEMPERATURE	Operating	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

<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.