

Datasheet

RedLine

underwater digital acoustic modem



DESCRIPTION:

RedLine is the series of wireless underwater digital communications modems that implement a transparent transmission channel.

RedLine modems have an unsurpassed correlation of such parameters as power consumption, dimensions, speed and transmission distance.

One-piece housing unified with a RedNODE devices allows you to use standard solutions for integration.

Small size, low power consumption and ease of use make RedLine ideal solution both for small ROV/AUV and larger devices.

Subscribers code division feature allows solving efficiently the data transfer tasks for several devices.

KEY FEATURES:

- Can be applied in underwater digital acoustic sensor networks
- Reliable data transmissions with 88 bit/s
- Minimum dimensions
- Operating range up to 8000 m
- Subscribers code division
- Reliable and noise-immune technology of digital broadband acoustic communication
- Low power consumption (Rx / Tx) 0.4 / 10 W
- Open configuration protocol
- Relay function

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TECHNICAL SPECIFICATION:

DIMENSIONS	Ø64x62 mm
WEIGHT (dry)	0.36 kg
DEPTH RATING	400 m
FREQUENCY BAND	5-15 kHz
BIT ERROR RATE	10 ⁻⁶
START-UP TIME	100 ms
SNR¹	-6 dB
WIRE LENGH²	1.5 m
MAX RELATIVE VELOCITY	+/- 3 m/sec
OPERATING TEMPERATURE RANGE	-5..50 °C
MAX OPERATING RANGE	8000 m
PAYLOAD DATA RATE	80 bit/sec
POWER CONSUMPTION Rx/Tx	0.4/10 W
POWER SUPPLY	12 V
INTERFACE³	UART 9600 bit/s
DIALOGUE PROTOCOL	NMEA 0183 PTNT
DATA LINES VOLTAGE	0..3.3 V

1. This value is obtained without the presence of the multiple effects

2. Length can be increased by special request

3. Port speed can be changed by special request