

## 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.

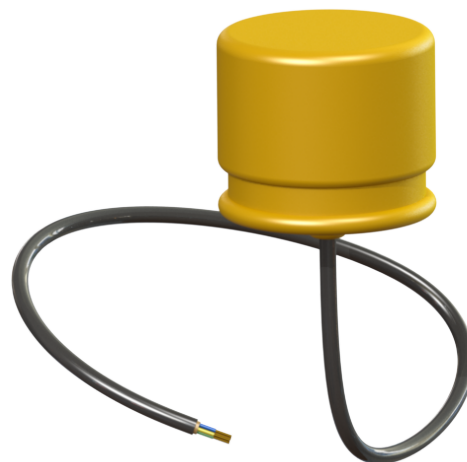
Subscribers code division feature allows solving efficiently the data transfer tasks for several devices.

### 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

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#### TECHNICAL SPECIFICATION:

<b>DIMENSIONS</b>	Ø64x62 mm
<b>WEIGHT (dry)</b>	0.36 kg
<b>DEPTH RATING</b>	400 m
<b>FREQUENCY BAND</b>	5-15 kHz
<b>BIT ERROR RATE</b>	10 <sup>-6</sup>
<b>START-UP TIME</b>	100 ms
<b>SNR</b> <sup>2</sup>	-6 dB
<b>WIRE LENGH</b>	1.5 m
<b>MAX RELATIVE VELOCITY</b>	+/- 2 m/sec
<b>OPERATING TEMPERATURE RANGE</b>	-5..50 °C
<b>MAX OPERATING RANGE</b>	8000 m
<b>PAYLOAD DATA RATE</b>	88 bit/sec
<b>POWER CONSUMPTION Rx/Tx</b>	0.4/10 W
<b>POWER SUPPLY</b> <sup>3</sup>	12 V
<b>INTERFACE</b>	UART 9600 bit/s
<b>DIALOGUE PROTOCOL</b>	NMEA 0183 PTNT
<b>DATA LINES VOLTAGE</b>	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