

# LUMA 100

The **LUMA 100** optical modem provides exceptional performance and energy efficiency in a compact design, making it ideal for underwater communication. It offers superior data rates, low latency, and lower power requirements than acoustic modems, serving as a seamless replacement for electrical wet-mate connectors and streamlining operations for ROV pilots. The **LUMA 100** is perfect for wireless interfacing between ROVs/AUVs and deep-sea instruments, featuring a configurable sleep mode that can be optically reactivated by another modem.

Designed for small ROVs and AUVs, the ultra-compact **LUMA 100** offers four transmission power levels (2 to 5 W) and a wide supply voltage range. Its software-configurable serial cable interface supports RS232 or RS485 for easy integration. Key features include a wide beam for effortless connection and ambient light capability. Applications include wireless access points for deep-sea infrastructure, data harvesting with AUVs, bottom-to-surface data uploads, and wireless video streaming for mini ROVs, making it a versatile subsea networking solution.



## SYSTEM SPECIFICATIONS

<b>Dimensions</b>	100 x 50 x 30 mm (3.94 x 1.97x 1.18 in)
<b>Weight in Air</b>	250 g (8.82 oz)
<b>Weight in Water</b>	50 g (1.76 oz)
<b>Data Rate: Optical Link</b>	115 Kbit/sec
<b>Data Rate: Cable Interface</b>	9.6 - 512 Kbit/sec
<b>Maximum Range</b>	2 m (6.56 ft)
<b>Supply Voltage</b>	12 - 36 V
<b>Depth Rating</b>	6000 m (19685 ft)
<b>Beam Pattern</b>	120 deg. cone

## SYSTEM FEATURES

<b>Software Features*</b>	Error Detection FEC Auto-wakeup
<b>Power Consumption: Sleep Mode</b>	< 10 mW
<b>Power Consumption: Active, Receiving</b>	0.5 W
<b>Power Consumption: Transmitting</b>	2 - 5 W (typ.)
<b>Connector</b>	SubConn MCIL6M or As Requested

*\*ADDITIONAL FEATURES ARE UPGRADEABLE UPON REQUEST.  
PRELIMINARY SPECIFICATIONS MAY CHANGE WITHOUT NOTICE*



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