



# PopotoModem

Enabling the underwater IOT revolution™

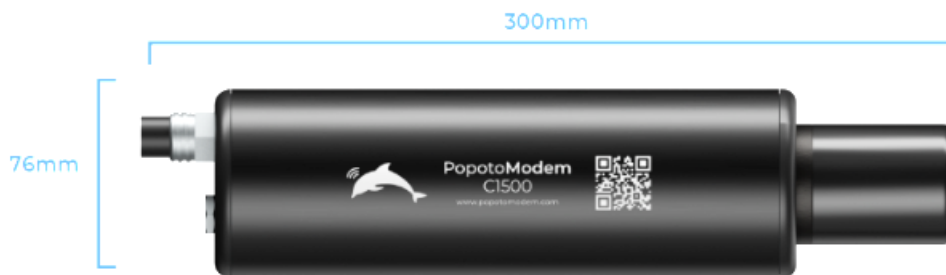
## Popoto C1500

### Product Overview

The Popoto C1500 is an advanced underwater acoustic modem in a high-depth, compact aluminum enclosure, delivering superb performance, unique features, and flexible interfacing. As part of our brand-new compact line of modems, the Popoto C1500 features our high-performance PMM4511 boardset and 77Wh Li-Ion battery, all contained within a space-optimized aluminum enclosure capable of withstanding depths of up to 2000 meters.

### Features

- Multiple modulation schemes from 80 BPS to 10240 BPS
- MARIA, Python, and MATLAB® APIs for on-board data processing and system automation
- Ethernet, RS422, and RS232 interfaces, including pShell, JSON, and a web interface
- Acoustic ranging (Accurate to <0.3m)
- High-capacity data logging (upgradeable with microSD)
- Baseband and passband waveform playback and recording during modem operation
- Option for Phorcys Stheno



## PopotoModem

128 Route 6A, Sandwich, MA, 02563

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[www.popotomodem.com](http://www.popotomodem.com)



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Data Transfer	
Data Rates	80 bps with Frequency Hopping FSK 10240, 5120, 2560, 1280, 640 bps with PSK Phorcys Stheno MS 0-31
Storage	32GB internal Expandable with microSD (up to 1.5tb+)
Transmit Power	175-180 dB re 1μPa @ 1m
Range	1-4 km (depending on conditions and modulation scheme selected)
Frequencies	20-35 kHz
Transducer Type	20-30 kHz Omnidirectional
Power	
Operating Voltage Range	8.5-36V
Power Draw	GPIO Enabled Sleep: < 10uW Acoustic Wake Up Deep Sleep: < 45 mW Acoustic Wake Up Sleep: 150 mW Active Receive: 1.2 W
Battery	1x 77Wh 22.2V Li-Ion
Interface	
Data Connections	Ethernet, RS-422, RS-232
External Interface Connections	SPI Bus, I2C Bus, GPIO, Analog
APIs	Python, C++, MATLAB®, JSON, JACK, and MARIA
Processor	Single Core 1.4GHz Arm® Cortex®-A53
Operating System	Debian Linux for user applications
Hardware	
Size	300mm x 76mm x 76mm
Weight	Dry: 1602g In Sea Water: 507g
Export Classifications	5A991 Controlled for anti-terrorism only



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