



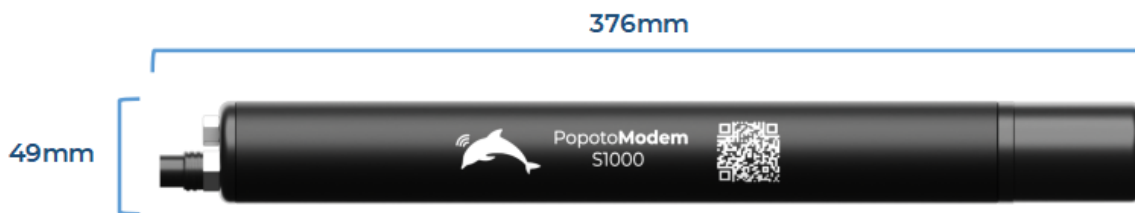
Popoto S1000

Product Overview:

The Popoto S1000 is an advanced underwater acoustic modem delivering superb performance, unique features, and flexible interfacing, making it suitable for nearly any application. Featuring a compact machined aluminum casing capable of withstanding depths of up to 1000 meters and a transmitter with up to 175-180 dB (re 1 μ Pa @ 1m), the S1000 is both versatile and robust.

Features:

- Multiple modulation schemes from 80 BPS to 10240 BPS
- Python and MATLAB® APIs for on-board data processing and system automation
- Acoustic ranging (Accurate to <0.3m)
- High-capacity data logging (SD Card)
- Baseband and passband waveform playback and recording during modem operation





Data Transfer	
Data Rates	80 bps with Frequency Hopping FSK 10240, 5120, 2560, 1280, 640 bps with PSK
Storage	128 GB on included uSD
Range	1-4 km depending on conditions and modulation scheme selected
Frequencies	22-35 KHz selectable
Transducer Type	20-30 KHz Omnidirectional
Power	
Operating Voltage Range	12-40V
Power Draw	GPIO Enabled Sleep: <10uW Acoustic Wake Up Deep Sleep: <45 mW Acoustic Wake Up Sleep: 150 mW Active Receive: 1.5 W
Transmit Power	175-180 dB re 1µPa @ 1m
Battery (Li Model Only)	22.2V 2500mAh Li-Ion
Interface	
Data Connections	Ethernet, RS-422, RS-232
External Interface Connections	SPI Bus, I2C Bus, GPIO, Analog
APIs	Python, C++, MATLAB®, JSON
Processor and Operating System	ARM9 Running Linux for user applications
Hardware	
Size	376mm x 49mm x 49mm
Weight	Dry: 1220g (Li model), 800g (RP model) In Sea Water: 550g (Li model), 250g (RP model)
Depth Rating	1000m
Export Classifications	5A991 Controlled for anti-terrorism only

