

# S1000-N



Powered by  
UnetStack

## The power of UnetStack in a compact, powerful & affordable package

S1000-N combines the power of the Popoto's S1000 series modems and Subnero's underwater network stack (UnetStack) to enable you to build advanced underwater networks today!



**IDEAL FOR  
SCIENTIFIC  
RESEARCH**

## KEY FEATURES

- The power of Popoto S-series modems
- Advanced UnetStack networking
- Up to 10240 bps data rate over 3+ km range
- APIs in multiple computer languages
- Multihop relay and routing
- Low power operations



PopotoModem



SUBNERO

# Technical Specifications

	FEATURES	DETAILS
Communication	Data rate	80 bps with Frequency Hopping FSK 10240, 5120, 2560, 1280, 640 bps with PSK
	Range	1-3 km depending on channel conditions and selected modulation scheme
	Frequency band	20-30 KHz
	Storage	128 GB on included uSD
Power	Operating voltage	12 - 40V
	Power consumption	GPIO Enabled Sleep: < 10uW Acoustic Wake-Up Deep Sleep: <45 mW Acoustic Wake-Up Sleep: 150 mW Active Receive: 1.5 W
	Transmit power	20 W
	Battery	22.2V 2500mAh Li-Ion
Interface	Data connections	Ethernet, RS-422, RS-232
	External interface connections	SPI Bus, I2C Bus, GPIO, Analog
Hardware	Dimensions	376mm x 49mm x 49mm
	Weight	Dry: 1275g (Nmodel), In Sea Water: 505g
	Depth rating	1000 m
Software	Software framework	UnetStack, <a href="http://www.unetstack.net">www.unetstack.net</a>
	Software interface	Java, Groovy, Python, C, Javascript, Julia, web UI, JSON/TCP
	Waveform player	Transmission and reception, passband and baseband



## POPOTO MODEM

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