



Popoto PMM5021

Product Overview:

The Popoto PMM5021 is the OEM version of Popoto Modem's underwater acoustic modem which delivers superb performance, unique features, and flexible interfacing, allowing for use in nearly any application. Featuring a low-SWAP 60x90x50mm form factor, a transmitter capable of transmitting at up to 100W, the PMM5021 is both versatile and robust.

Features:

- Multiple modulation schemes from 80 BPS to 10240 BPS
- Python API for on-board user programming
- MATLAB API for data analysis
- Acoustic ranging (Accurate to <0.3m)
- High-capacity data logging (SD card or optional SATA drive)
- Baseband and passband waveform playback and recording
- JANUS (NATO ANEP-87) compliant version available
- Single Sideband Analog Voice



\$3395 USD*

*OEM Electronics only





Data Transfer	
Data Rates	80 bps with Frequency Hopping FSK 10240, 5120, 2560, 1280, 640 bps with PSK
Storage	Up to 128 GB on uSD Expandable with optional SATA Drive
Range	1-8 km depending on conditions and modulation scheme selected.
Frequencies	22-35 KHz selectable 10-14KHz available (changes export classification)
Transducer Type	20-30 KHz Omnidirectional
Voice Communications	
Voice Features Included	Single Sideband Voice Adaptive Squelch and Vox Noise Cancellation
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: 1.5 W
Transmit Power	100 W
Battery	1 to 4 x 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
Linux Operating System	ARM9 Running Linux available for user applications
Hardware	
Size	60mm x 90mm x 50mm
Weight	Dry: 0.5 Kg
Export Classifications	5A991 Controlled for anti-terrorism only

