

## Miniature Dual Frequency OEM Digital Data Link

The all new pMDDL5824 is a miniature OEM, high power, software selectable 2.4GHz & 5 GHz wireless digital data link solution. The Pico MIMO DDL features a 2x2 MIMO Digital Data Link using Maximal Ratio Combining (MRC), Maximal Likelihood (ML) decoding and Low-Density Parity Check (LDPC) to achieve robust RF performance.

2.4 & 5 GHz

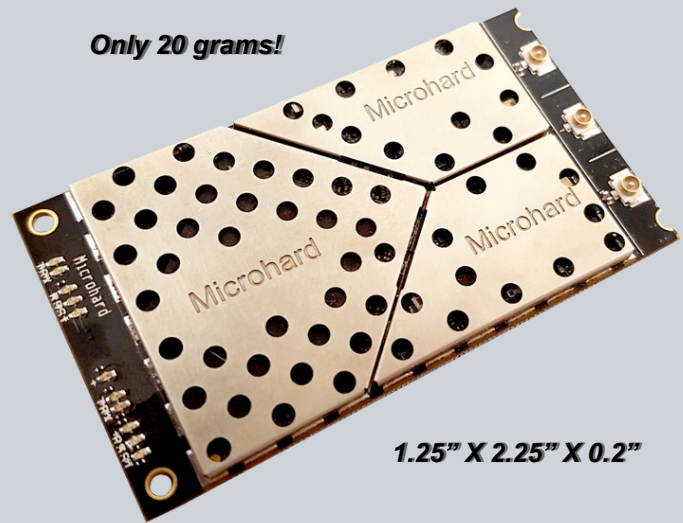
Up to 25Mbps

2X2 MIMO

Ethernet + Serial

PTP | Multipoint | Relay

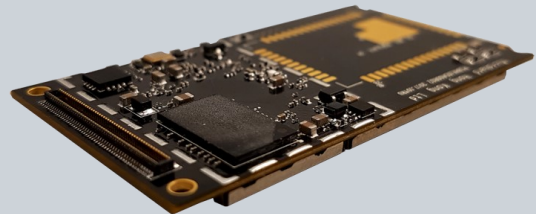
Only 20 grams!



1.25" X 2.25" X 0.2"

## pMDDL5824 Features

- Robust 2X2 MIMO with Selectable 2.4 GHz or 5 GHz Operation
- Maximal Ratio Combining (MRC), Maximal Likelihood (ML) decoding
- Low-Density Parity Check (LDPC)
- Up to 25 Mbps Iperf Throughput @ 8MHz channel (-78dBm)  
Up to 2 Mbps IPerf Throughput @ 2MHz channel (-102dBm)
- Extremely small foot print and very lightweight
- Dual 10/100 Ethernet Ports (LAN/WAN)
- Supports Point-to-Point, Point-to-Multipoint, Mesh (Future) Networks
- Master, Remote, Relay Operating Modes.
- Adjustable total transmit power (up to 1W)
- Interface through local console, telnet, and web browser



# Specifications

Frequency (Selectable)	2.402 - 2.478 GHz 5.000 - 5.900 GHz	Optimal Performance Specifications			
		Modulation	IPerf Throughput (Mbps)	Optimal MRC Sensitivity (dBm)	Total Tx Power (dBm) +/- 1dB
<b>Error Detection</b>	32 bits of CRC, ARQ	<b>8 MHz (2X2 MIMO ON)</b>			
<b>Encryption (Requires Export Permit)</b>	128-bit AES	BPSK_1/2	3	-99.5	30dBm
		QPSK_1/2	5.9	-98	30dBm
		QPSK_3/4	8.8	-96	30dBm
<b>Ports</b> Serial Data/Console Ethernet USB	RS232 TTL level (300bps to 921kbps) Dual 10/100BaseT IEEE802.3 (LAN/WAN) 2.0 (Future Development)	16QAM_1/2	11.6	-92	30dBm
		16QAM_3/4	17.1	-90	30dBm
		64QAM_2/3	22.8	-85	30dBm
		64QAM_3/4	25.5	-83.5	30dBm
		64QAM_5/6	27.8	-81	30dBm
<b>Firewall</b>	Port Forwarding, Access Control, IP/MAC List.	<b>4 MHz (2X2 MIMO ON)</b>			
<b>Operating Modes</b>	Point-to-Point, Point-to-Multipoint, Relay, Mesh (future)	BPSK_1/2	1.51	-102.5	30dBm
		QPSK_1/2	2.98	-101	30dBm
<b>Diagnostics</b>	Remote Diagnostics, Ping, Traceroute, ARP table, DHCP active leases, IPerf, RSSI	QPSK_3/4	4.4	-99	30dBm
		16QAM_1/2	5.8	-95.5	30dBm
		16QAM_3/4	8.6	-93	30dBm
<b>Management</b>	Local Serial Port Console, Telnet, WebUI, SNMP, FTP Upgrade, TFTP, CLI (Command Line Interface)	64QAM_2/3	11.4	-88	30dBm
		64QAM_3/4	12.8	-86	30dBm
		64QAM_5/6	14	-83.5	30dBm
		<b>Rejection</b>			
	Excellent strong signal interference & rejection characteristics	<b>Modulation</b>	<b>IPerf Throughput (Mbps)</b>	<b>Optimal MRC Sensitivity (dBm)</b>	<b>Total Tx Power (dBm) +/- 1dB</b>
<b>Input Voltage</b>	Digital Voltage = 3.3V / RF Voltage = 5V	<b>8 MHz (MIMO OFF)</b>			
<b>Connectors:</b>	Antenna(s): UFL Data: 100 pin OEM Header	BPSK_1/2	3	-96.5	30dBm
		QPSK_1/2	5.8	-95	30dBm
		QPSK_3/4	8.6	-93	30dBm
		16QAM_1/2	11.5	-89	30dBm
<b>Environmental</b> Temperature Humidity	-40°F to 185°F (-40°C to +85°C) 5-95%, non-condensing	16QAM_3/4	16.9	-87	30dBm
		64QAM_2/3	22.2	-82	28dBm
		64QAM_3/4	24.7	-80.5	28dBm
<b>Weight</b>	Approx. 20 grams	64QAM_5/6	27.4	-78	27dBm
<b>Dimensions</b>	Approx. 1.25" x 2.25" x 0.2" (32mm x 57mm x 5mm)	<b>4 MHz (MIMO OFF)</b>			
		BPSK_1/2	1.5	-99.5	30dBm
		QPSK_1/2	2.9	-98	30dBm
		QPSK_3/4	4.3	-96	30dBm
		16QAM_1/2	5.7	-92.5	30dBm
<b>pMDDL5824 (MHK185800)</b>	2X2 MIMO 2.4 / 5 GHz OEM DDL Module	16QAM_3/4	8.4	-90	30dBm
		64QAM_2/3	11.3	-85	28dBm
		64QAM_3/4	12.5	-83	28dBm
		64QAM_5/6	14	-80.5	27dBm
		<b>Order Options</b>			

## Order Options

## Contact Information

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