

Miniature Dual Frequency OEM Digital Data Link

The pMDDL2460 is a miniature, 2.4 GHz and 5-6 GHz long range wireless modem. The pMDDL2460 delivers a OEM solution compatible with the Microhard pMDDL footprint. The modem features OFDMA using 2 Transmit and 4 Receive Antenna's. The pMDDL2460 is capable of long range for wireless data transmission.

Only 12 grams!



1.05" X 1.3" X 0.30"

2.4 GHz & 5-6 GHz

MIMO 2TX and 4RX

> 100 Mbps

Ethernet, USB, Serial

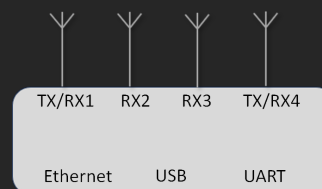
PTP | PMP | Relay | MESH

Spectrum Scan

4/5/8/10/20/40 MHz Channels

Features

- Software Selectable 2.4 GHz or 5-6 GHz Operation
- Software Selectable Channel Bandwidth
- Maximal Ratio Combining (MRC), Maximal Likelihood (ML) decoding
- Low-Density Parity Check (LDPC)
- Up to 32 Mbps Iperf Throughput @ 8 MHz channel (-87 dBm)
- Up to 16 Mbps IPerf Throughput @ 4 MHz channel (-90 dBm)
- Adjustable total transmit power (up to 1W)
- Ethernet, Serial & USB Ports
- Supports Point-to-Point, Point-to-Multipoint & MESH Networks
- Master, Remote, Relay & MESH Operating Modes.
- Local and remote wireless firmware upgrading through FTP



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Specifications



Frequency (Selectable)	2.402 - 2.478 GHz 5 - 6 GHz
Error Detection	CRC / FEC Coding
Ports	Serial Data/Console Ethernet USB
Firewall	Port Forwarding, Access Control, IP/MAC List.
Operating Modes	Point-to-Point, Point-to-Multipoint, Relay, MESH
Diagnostics	Remote Diagnostics, Ping, Traceroute, ARP table, DHCP active leases, IPerf, RSSI
Management	Local Serial Port Console, Telnet, WebUI, SNMP, FTP Upgrade, TFTP, CLI (Command Line Interface)
Rejection	Excellent strong signal interference & rejection characteristics
Input Voltage	OEM SWP/ENC Digital Voltage = 3.3V / RF Voltage = 5V 8 - 30 VDC
Connectors:	OEM Antennas: UFL x4 (2x TX, 4x RX) Data: 80 Pin SMT SWP Antennas: MMCX x4 Power, Ethernet, USB, Serial Enclosed Antennas: SMA Female x4 (ANT1-ANT4) Ethernet: RJ45 Serial: DE9 Female USB: Type-C Power: 4-PIN Interlock
Environmental	Temperature Humidity -40°F to 185°F (-40°C to +85°C) 5-95%, non-condensing
Weight	OEM SWP Enclosed Approx. 12 grams Approx. 77 grams Approx. 135 grams
Dimensions	OEM SWP Enclosed ~ 27 x 33 x 8mm ~ 36 x 55 x 25mm ~ 85 x 65 x 23mm
Certifications (Pending)	FCC/IC CE MIC-Japan

2.4GHz Optimal Performance Specifications			
Modulation	IPerf Throughput (Mbps)	Optimal MRC Sensitivity (dBm)	Total Tx Power (dBm) +/- 1dB
	STBC	4x RX ANTENNA	2x TX ANTENNA
8 MHz (MIMO ON)			
BPSK_1/2	3.2	-103	30dBm
QPSK_1/2	6.3	-101	30dBm
QPSK_3/4	9.5	-99	30dBm
16QAM_1/2	12.6	-97	30dBm
16QAM_3/4	19	-95	30dBm
64QAM_2/3	25.4	-91	30dBm
64QAM_3/4	28.6	-89	30dBm
64QAM_5/6	32	-87	30dBm
4 MHz (MIMO ON)			
BPSK_1/2	1.6	-106	30dBm
QPSK_1/2	3.2	-104	30dBm
QPSK_3/4	4.6	-102	30dBm
16QAM_1/2	6.5	-100	30dBm
16QAM_3/4	9	-98	30dBm
64QAM_2/3	12.5	-94	30dBm
64QAM_3/4	14	-92	30dBm
64QAM_5/6	16	-90	30dBm

5GHz Optimal Performance Specifications			
Modulation	IPerf Throughput (Mbps)	Optimal MRC Sensitivity (dBm)	Total Tx Power (dBm) +/- 1dB
	STBC	4x RX ANTENNA	2x TX ANTENNA
8 MHz (MIMO ON)			
BPSK_1/2	3.2	-103	30dBm
QPSK_1/2	6.3	-101	30dBm
QPSK_3/4	9.5	-99	30dBm
16QAM_1/2	12.6	-97	30dBm
16QAM_3/4	19	-95	30dBm
64QAM_2/3	25.4	-91	30dBm
64QAM_3/4	28.6	-89	30dBm
64QAM_5/6	32	-87	30dBm
4 MHz (MIMO ON)			
BPSK_1/2	1.6	-106	30dBm
QPSK_1/2	3.2	-104	30dBm
QPSK_3/4	4.6	-102	30dBm
16QAM_1/2	6.5	-100	30dBm
16QAM_3/4	9	-98	30dBm
64QAM_2/3	12.5	-94	30dBm
64QAM_3/4	14	-92	30dBm
64QAM_5/6	16	-90	30dBm

Optimal Throughput		
Bandwidth	2.4GHz	5GHz
4MHz	+25	+25
5MHz	+45	+45
8MHz	+50	+50
10MHz	+90	+90
20MHz	+180	+200
40MHz	+350	+400

Order Options	
pMDDL2460	2.4 / 5-6 GHz OEM Digital Data Link
pMDDL2460-SWP	2.4 / 5-6 GHz Miniature Digital Data Link
pMDDL2460-ENC	2.4 / 5-6 GHz Enclosed Digital Data Link

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