

Miniature OEM Wireless Digital Data Link

The Pico MIMO Digital Data Link is a miniature OEM, high power, 2x2 MIMO 2.3GHz wireless OEM solution that provides the bandwidth and range needed for complex data intensive applications. The Pico MIMO DDL features 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. The pMDDL features secure & simultaneous Ethernet and Serial Data communications.

Only 7 grams!

> 50km Range

Up to 25Mbps

36dBm (4W)

Ethernet + Serial + USB

Mesh | Multipoint | Relay

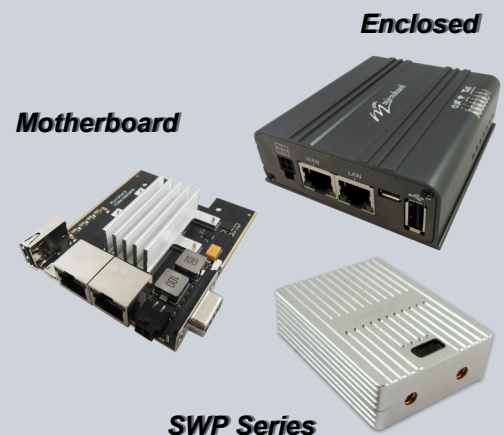


1.3" X 1.05" X 0.14"

pMDDL2350 Features

- Robust 2X2 MIMO 2.3GHz Operation
- Adjustable total transmit power (up to 36dBm)
- Maximal Ratio Combining (MRC), Maximal Likelihood (ML) decoding
- Low-Density Parity Check (LDPC)
- Up to 25Mbps Iperf Throughput @ 8MHz channel (-78dBm)
Up to 2Mbps IPerf Throughput @ 4MHz channel (-102dBm)
- Extremely small foot print and very lightweight
- Serial Communication Port
- Dual 10/100 Ethernet Ports (LAN/WAN)
- Supports Point-to-Point, Point-to-Multipoint and Mesh Networks
- Master, Remote, Relay, Mesh Operating Modes.
- Interface through local console, telnet, and web browser
- Local and remote wireless firmware upgrading through FTP

Interface Options



Specifications

Frequency		2.304 - 2.39GHz	Optimal Performance Specifications				
Error Detection		32 bits of CRC, ARQ	Modulation	IPerf Throughput (Mbps)	Optimal MRC Sensitivity (dBm)	Total Tx Power (dBm) +/- 1dB	
Encryption (Requires Export Permit)		128-bit AES (Optional 256-bit AES)					
Ports		RS232 TTL level (300bps - 230kbps) Dual 10/100BaseT IEEE802.3 (LAN/WAN) 2.0	8 MHz (2X2 MIMO ON)				
Serial Data/Console			BPSK_1/2	3	-99.5	36dBm	
Ethernet			QPSK_1/2	5.9	-98	36dBm	
USB			QPSK_3/4	8.8	-96	36dBm	
Firewall		Port Forwarding, Access Control, IP/MAC List.	16QAM_1/2	11.6	-92	36dBm	
Operating Modes		Point-to-Point, Point-to-Multipoint, Relay, Mesh	16QAM_3/4	17.1	-90	33dBm	
Diagnostics		Remote Diagnostics, Ping, Traceroute, ARP table, DHCP active leases, IPerf, RSSI	64QAM_2/3	22.8	-85	30dBm	
			64QAM_3/4	25.5	-83.5	30dBm	
Management		Local Serial Port Console, Telnet, WebUI, SNMP, FTP Upgrade, TFTP, CLI (Command Line Interface)	64QAM_5/6	27.8	-81	30dBm	
Rejection		Excellent strong signal interference & rejection characteristics	4 MHz (2X2 MIMO ON)				
Input Voltage		Digital Voltage = 3.3V / RF Voltage = 5V 7 - 30VDC	BPSK_1/2	1.51	-102.5	36dBm	
OEM			QPSK_1/2	2.98	-101	36dBm	
Enclosed/MB			QPSK_3/4	4.4	-99	36dBm	
			16QAM_1/2	5.8	-95.5	36dBm	
Connectors:		Antenna: UFL x2 (ANT1, ANT2) Data: 80 Pin SMT Antenna: SMA Female x2 Data: RJ-45 x2 (Ethernet) Female DB9 (Serial) USB Type A Micro-AB USB (Console) 4 PIN Interlock (Vin)	16QAM_3/4	8.6	-93	33dBm	
OEM			64QAM_2/3	11.4	-88	30dBm	
Enclosed			64QAM_3/4	12.8	-86	30dBm	
			64QAM_5/6	14	-83.5	30dBm	
			Modulation	IPerf Throughput (Mbps)	Optimal MRC Sensitivity (dBm)	Total Tx Power (dBm) +/- 1dB	
			8 MHz (MIMO OFF)				
Environmental			Temperature Humidity	BPSK_1/2	3	-96.5	33dBm
				QPSK_1/2	5.8	-95	33dBm
		QPSK_3/4		8.6	-93	33dBm	
Weight		~ 7 grams ~ 75 grams ~ 230 grams ~ 37 grams	16QAM_1/2	11.5	-89	33dBm	
OEM			16QAM_3/4	16.9	-87	30dBm	
Motherboard			64QAM_2/3	22.2	-82	28dBm	
Enclosed			64QAM_3/4	24.7	-80.5	28dBm	
SWP			64QAM_5/6	27.4	-78	27dBm	
			4 MHz (MIMO OFF)				
Dimensions		~27 x 33 x 4 mm ~70 x 83 x 23 mm ~81 x 88 x 29 mm ~36 x 48 x 15 mm	BPSK_1/2	1.5	-99.5	33dBm	
			QPSK_1/2	2.9	-98	33dBm	
			QPSK_3/4	4.3	-96	33dBm	
			16QAM_1/2	5.7	-92.5	33dBm	
			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	
Order Options							
MHK185600			2X2 MIMO 2.3 GHz OEM Digital Data Link				
MHK185650		2X2 MIMO 2.3 GHZ Enclosed Digital Data Link					
MHK185670		2X2 MIMO 2.3 GHZ SWP Digital Data Link					

Contact Information

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