

## Miniature OEM 900MHz/2.4 GHz Digital Data Link

The Pico Digital Data Link is a dual frequency, software selectable 900 MHz & 2.4 GHz wireless OEM solution that provides the bandwidth and range needed for complex data intensive applications. The pDDL900 features secure, simultaneous Ethernet and Serial Data communications. Robust digital modulation technology provides secure data transfer and long range capabilities.

Up to 25Mbps

900 MHz & 2.4 GHz

Ethernet + Serial

Up to 1 Watt

PTP & Multipoint

Weighs only 10g!



1.3" X 1.05" X 0.30"

## Features

- Software Selectable 900 MHz & 2.4 GHz
- Up to 25 Mbps Iperf Throughput @ 8MHz channel (-78dBm)
- Extremely small foot print and very lightweight
- Serial Communication Port
- Dual 10/100 Ethernet Ports (LAN/WAN)
- Supports Point-to-Point and Point-to-Multipoint Networks
- Master & Remote Operating Modes.
- Adjustable transmit power (up to 1W)
- Interface through local console, telnet, and web browser
- Local and remote wireless firmware upgrading through FTP

## Interface Options



pDDL Motherboard



pDDL Enclosed

# Specifications

Frequencies (selectable)		Performance Specifications			
<b>Error Detection</b>	32 bits of CRC, ARQ				
<b>Encryption</b> <i>(Requires Export Permit)</i>	128-bit AES				
<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)	<b>8 MHz</b>			
		BPSK_1/2	3	-96	30dBm
<b>Firewall</b>	Port Forwarding, Access Control, IP/MAC List.	QPSK_1/2	6	-94	30dBm
<b>Operating Modes</b>	Point-to-Point, Point-to-Multipoint, Mesh (future)	QPSK_3/4	9	-91	30dBm
<b>Diagnostics</b>	Remote Diagnostics, Ping, Traceroute, ARP table, DHCP active leases, SNR, RSSI	16QAM_1/2	12	-88	29dBm
<b>Management</b>	Local Serial Port Console, Telnet, WebUI, SNMP, FTP Upgrade, TFTP, CLI (Command Line Interface)	16QAM_3/4	17	-85	29dBm
		64QAM_2/3	23	-80	27dBm
<b>Rejection</b>	Excellent strong signal interference & rejection characteristics	64QAM_3/4	25	-78	27dBm
<b>Input Voltage</b> OEM Motherboard/ENC	Digital Voltage = 3.3V / RF Voltage = 5V 7 - 30 VDC	64QAM_5/6	28	-76	27dBm
		<b>4 MHz</b>			
<b>Connectors:</b> OEM  Motherboard/ENC	Antenna: UFL x2 (900MHz, 2.4 GHz) Data: 80 Pin SMT  Antenna (Enclosed): RP-SMA Female x2 Data: RJ-45 x2 (Ethernet) Female DB9 (Serial) USB Type A (Future) 4 PIN Interlock (Vin, I/O)	BPSK_1/2	1.5	-99	30dBm
		QPSK_1/2	3	-98	30dBm
		QPSK_3/4	4.5	-96	30dBm
		16QAM_1/2	6	-92	29dBm
		16QAM_3/4	9	-88	29dBm
		64QAM_2/3	11.5	-83	27dBm
<b>Environmental</b> Temperature Humidity	-40°F to 185°F (-40°C to +85°C) 5-95%, non-condensing	64QAM_3/4	12.5	-82	27dBm
		64QAM_5/6	14	-80	27dBm
<b>Weight</b> OEM Motherboard Enclosed	Approx. 10 grams Approx. 55 grams Approx. 175 grams	<b>2 MHz</b>			
		BPSK_1/2	0.78	-101	30dBm
<b>Dimensions</b> OEM Motherboard Enclosed	Approx. 1.05" x 1.3" x .30" (27mm x 33mm x 8mm) Approx. 2.5" x 3.0" x 0.70" (64mm x 76mm x 18mm) Approx. 3.05" x 2.2" x 1.1" (77mm x 55mm x 28mm)	QPSK_1/2	1.5	-100	30dBm
		QPSK_3/4	2.2	-97	30dBm
		16QAM_1/2	2.9	-93	29dBm
<b>Approvals</b>	FCC IC	16QAM_3/4	4.3	-90	29dBm
		64QAM_2/3	5.5	-86	27dBm
<b>Frequency Options</b>		64QAM_3/4	6	-84	27dBm
<b>MHS118100 - pDDL900</b>	Dual Frequency 900MHz/2.4GHz	64QAM_5/6	6.5	-82	27dBm
<b>MHS118200 - pDDL1800</b>	Single Frequency 1810-1850MHz, Single Antenna				

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