



## MOTOROLA WIRELESS BROADBAND

# PTP 100 Series

## Motorola PTP 100 Wireless Ethernet Bridges

The Motorola PTP 100 Series of Point-to-Point wireless Ethernet bridges provide a low-cost-of-entry solution for deployment, expansion and extension of broadband communications networks. The PTP 100 Series also offers the scalability of simple, affordable software key-based license upgrades for additional performance and capacity as networks grow.

An organization can begin with a system that delivers 2 Mbps of aggregate throughput at one of the lowest initial costs in the industry. When upgrades are needed, the user simply purchases software license keys that allow incremental over-the-air upgrades to 4 Mbps and to 7.5 Mbps aggregate data rates. Licenses that deliver up to 14 Mbps are also available. Upgrades are fast, easy and cost-efficient.

The PTP 100 provides access in the 2.4, 5.2, 5.4 and 5.8 GHz frequencies. Using reflectors, ranges can be extended up to 35 miles (56 kilometers) in Line-of-Sight (LOS) environments. The system also provides powerful multi-level modulation schemes to mitigate against interference. Security solutions include built-in over-the-air DES encryption with AES encryption available as an option.

### Motorola Wireless Broadband Leadership

The PTP 100 Series leverages Motorola's more than 80 years of wireless industry leadership, innovation and worldwide customer service and support. The PTP 100 is part of Motorola's comprehensive Point-to-Point solutions that offer high-speed connectivity – up to 300 Mbps – in challenging LOS, near-LOS and Non-LOS environments for data, voice and video communications.

### Motorola Innovation

Motorola's comprehensive portfolio of reliable and cost-effective wireless broadband solutions together with our WLAN solutions provide and extend coverage both indoors and outdoors. The Motorola Wireless Broadband portfolio offers high-speed Point-to-Point, Point-to-Multipoint, Mesh, WiFi and WiMAX networks that support data, voice and video communications, enabling a broad range of fixed and mobile applications for public and private systems. With Motorola's innovative software solutions, customers can design, deploy and manage a broadband network, maximizing uptime and reliability while lowering installation costs.



## SPECIFICATION SHEET

PTP 100 Series  
Motorola PTP 100 Wireless Ethernet Bridges

	PTP 100 2 & 4 Mbps	PTP 100 7.5 Mbps	PTP 100 14 Mbps
<b>Market Availability</b>	Asia Pacific	Worldwide	Worldwide
<b>Radio Technology</b>			
Frequency Band	5725-5850 MHz	2400-2483 MHz, 5250-5350 MHz 5470-5725 MHz, 5725-5850 MHz	
Non Overlapping Channels	6		
Channel Size	20 MHz		
Channel Spacing	Every 5 MHz		
EIRP	Adjustable from 10 mW to 1.0 W		
Antenna Gain	7 dB		
Reflector Gain	18 dB		
Antenna Beamwidth	3 dB Antenna Beam with 6 degrees Azimuth & Elevation		
Modulation	High Index 2- Level FSK Optimized for Interference Rejection		High Index 4- Level FSK Optimized for Interference Rejection
Access Method	Time Division Duplex (TDD)		
<b>Performance</b>			
Typical Aggregate Useful Throughput	2 & 4 Mbps	7.5 Mbps	14 Mbps
Typical LOS Range	2 Miles (3.2 km)	2.4 GHz: 5 Miles (8 km) 5.2, 5.4 & 5.7 GHz: 2 Miles (3.2 km)	2.4 GHz: 2 Miles (3.2 km) 5.4 & 5.7 GHz: 1 Mile (1.6 km)
Typical LOS Range (With Reflector)	5.7 GHz: 35 Miles (56 km)	2.4 GHz: 35 Miles (56 km) 5.2 & 5.4 GHz: 10 Miles (16 km) 5.7 GHz: 35 Miles (56 km)	
Latency	2.5 msec		
Encryption	DES & AES		
Receive Sensitivity	-86 dBm		-79 dB
Carrier to Interference Ratio (C/I)	~3 dB at -65 dBm		~10 dB at -65 dBm
DFS	5.4 GHz: Implements DFS and TPC		
<b>Data</b>			
Interface	10/100 Base T, half/full Duplex, Rate Auto Negotiated (802.3 compliant)		
Protocols Used	IPV4, UDP, TCP, ICMP, Telnet, HTTP, FTP, SNMP		
Network Management	HTTP, TELNET, FTP, SNMP V2c		
<b>Physical</b>			
DC Power (Typical)	0.34A@24 VDC = 8.2W		
Dimensions (Module)	11.75" H x 3.4" W x 3.4" D (29.9 cm H x 8.6 cm W x 8.6 cm D)		
Dimensions (Passive Reflector)	18" H x 24" W (45 cm H x 60 cm W)		
Weight	1 lb (.45 kg)		
Operating Temperature	-40° C to +55° C (-40° F to +131° F)		
Wind Speed Survival	190 km/hr (118 miles/hr)		
Mean Time Between Failure (MTBF)	> 40 Years		

### STANDARDS

**CE**  
5.4 GHz: Europe EN 301 893  
5.7 GHz: Europe EN 302 502

**FCC Identification**  
2.4 GHz: ABZ89FC5808  
5.2 GHz: ABZ89FC3789  
5.4 GHz: ABZ89FT7623  
5.7 GHz: ABZ89FT7630

**Industry Canada (IC)**  
2.4 GHz: 109W-2400  
5.2 GHz: 109W-5200  
5.4 GHz: 109W-5400  
5.7 GHz: 109W-5700G



**MOTOROLA**

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