

**MOTOWi<sup>4</sup>**

# Motorola Point-to-Point Bridges – PTP 400 Series



Integrated



Connectorized



Motorola PTP 400 Bridges  
5.8 GHz

Motorola PTP 400 Bridges  
5.4 GHz

Motorola PTP 400 Bridges  
4.9 GHz

## Technical Specifications for the POINT-TO-POINT BRIDGES – PTP 400 SERIES

RADIO TECHNOLOGY	REMARKS
RF band	5.725 GHz–5.850 GHz* 5.470 GHz–5.725 GHz* 4.945, 4.955, 4.965, 4.975, 4.985 GHz*
Channel size	<b>5.8 and 5.4 GHz:</b> 12 MHz <b>4.9 GHz:</b> 10 MHz
Channel selection/ dynamic frequency control	By <i>Intelligent</i> Dynamic Frequency Selection (DFS) or manual intervention; automatic detection on start-up and continual adaptation to avoid interference
Transmit power control	Adaptive, varying between 25 dBm and -10 dBm according to modulation selected and radio path**
System gain	<b>5.8 and 5.4 GHz Integrated:</b> Varies with modulation mode; up to 168 dB with 23.5 dBi integrated antenna** <b>4.9 GHz Integrated:</b> Varies with modulation mode; up to 163 dB** <b>Connectorized:</b> Varies with modulation mode and antenna type**
Receiver sensitivity	Adaptive, varying between -96.0 dBm and -72 dBm according to modulation selected
Modulation	Dynamic; 8 modes adapting between BPSK and 64 QAM
Error correction	FEC, ARQ
Duplex scheme	TDD ratio 50:50, 66:33; same or split frequency Tx/Rx
Antenna: type/gain/B/W	<b>Integrated:</b> Integrated flat plate 23 dBi / 7° <b>Connectorized:</b> Approved to operate with flat plate up to 28 dBi or parabolic dish up to 37.7 dBi; connected via 2 x N-type female
Range	Up to 124 miles (200 km)***
Data rates	<b>5.8 and 5.4 GHz:</b> Up to 43 Mbps at the Ethernet; dynamically variable with modulation range from 3.0 Mbps to 43 Mbps (aggregate) <b>5.8 and 5.4 GHz Lite:</b> Up to 21 Mbps at the Ethernet; dynamically variable with modulation range from 1.5 Mbps to 21 Mbps (aggregate) <b>4.9 GHz:</b> Up to 35 Mbps at the Ethernet <b>4.9 GHz Lite:</b> Up to 17 Mbps at the Ethernet
Security and encryption	Proprietary scrambling mechanism; optional AES 128 Bit Encryption <i>* Regulatory conditions for RF bands should be confirmed prior to system purchase</i> <i>** Gain and maximum transmit power may vary based on regulatory domain</i> <i>*** In all cases the range limit is set by the latest software release</i>
ETHERNET BRIDGING	REMARKS
Protocol	IEEE 802.3
Packet prioritization	IEEE 802.1p
Interface	10 BASE-T / 100 BASE-T (RJ-45)–auto MDI/MDIX switching
Latency	<b>Throughput Mode:</b> Less than 7 mSec (default) <b>Latency Mode:</b> Less than 6 mSec
MANAGEMENT & INSTALLATION	REMARKS
LED indicators	Power status, Ethernet link status and activity
System management	Web Server and SNMP
Installation	Built-in audio assistance for link optimization
Connection	Distance between outdoor unit and primary network connection: up to 330' (100 meters)
PHYSICAL	REMARKS
Dimensions	<b>Integrated outdoor unit (ODU):</b> Width 14.5" (370 mm), Height 14.5" (370 mm), Depth 3.75" (95 mm) <b>Connectorized ODU:</b> Width 12" (305 mm), Height 12" (305 mm), Depth 4.1" (105 mm) <b>Powered indoor unit (PIDU Plus):</b> Width 9.75" (250 mm), Height 1.5" (40 mm), Depth 3" (80 mm)
Weight	<b>Integrated ODU:</b> 12.1 lbs (5.5 kg) including bracket <b>Connectorized ODU:</b> 9.1 lbs (4.3 kg) including bracket <b>PIDU Plus:</b> 1.9 lbs (864 g)
Wind speed	150 mph (242 kph)
Power supply	Integrated with Indoor Unit
Power source	90–240 VAC, 50–60 Hz / 36-60V DC
Power consumption	55 W max
ENVIRONMENTAL & REGULATORY	REMARKS
Operating temperature	-40°F (-40°C) to +140°F (+60°C), including solar radiation
Protection and safety	IP65/ UL60950; IEC60950; EN60950; CSA-C22.2 No. 60950
Radio	<b>5.8 GHz:</b> FCC Part 15, sub-part C 15.247, Eire ComReg 03/42, UK Approval to IR2007 <b>5.4 GHz:</b> EN 301 893 <b>4.9 GHz:</b> FCC Part 90
EMC	USA–FCC Part 15, Class B; Europe–EN 301 489-4