



PTP 58400 & PTP 54400

Motorola 5.8 and 5.4 GHz Point-to-Point Bridges



High Availability Wireless Ethernet Bridges

Operating in the 5.8 and 5.4 GHz bands at data rates up to 43 Mbps, the Motorola wi4 Fixed Point-to-Point Wireless Ethernet Bridges – PTP 400 Series – out-perform comparable wireless systems by maintaining up to 99.999% availability even in non-line-of-sight environments, across long distances, through high-interference areas, over open terrain or water and through extreme weather conditions.

Through Motorola's unique combination of technologies, the systems offer a wireless alternative to remove network bottlenecks, improve communications reliability and increase performance – at less cost than comparable wire-line solutions.

The PTP 400 Series bridges are incorporated in Motorola's MOTOwi4 portfolio of innovative wireless broadband solutions that create, complement and complete IP networks.

Delivering IP coverage to virtually all spaces, the MOTOwi4 portfolio includes Fixed Broadband, WiMAX, Mesh, and Broadband-over-Powerline solutions for private and public networks.

Motorola PTP 58400 Bridges 5.8 GHz Part Numbers

BP5730BH-2 Integrated
BP5730BHC-2 Connectorised
BP5730BH20-2 Integrated Lite
BP5730BHC20-2 Connectorised Lite

Motorola PTP 54400 Bridges 5.4 GHz Part Numbers

BP5430BH-2 Integrated
BP5430BHC-2 Connectorised
BP5430BH20-2 Integrated Lite
BP5430BHC20-2 Connectorised Lite

TECHNICAL SPECIFICATIONS

Technical Specifications for the Motorola 5.8 and 5.4 GHz Point-To-Point Bridges – PTP 400 Series

Radio Technology	Remarks
RF band	5.725 GHz–5.850 GHz*
Channel size	5.470 GHz–5.725 GHz*
Channel selection/ dynamic frequency control	12 MHz
Transmit power	By <i>intelligent</i> Dynamic Frequency Selection (<i>i</i> -DFS) or manual intervention; automatic detection on start-up and continual adaptation to avoid interference
System gain	Adaptive, varying between 25 dBm and -10 dBm according to modulation selected and radio path**
Receiver sensitivity	Integrated: Varies with modulation mode; up to 167 dB with 23 dBi integrated antenna**
Modulation	Connectorised: Varies with modulation mode and antenna type**
Error correction	Adaptive, varying between -96.0 dBm and -72 dBm according to modulation selected
Duplex scheme	Dynamic; 8 modes adapting between BPSK and 64 QAM
Antenna: type/gain/B/W	FEC, ARQ
Range	TDD ratio 50:50, 66:33; same or split frequency Tx/Rx
Data rates	Integrated: Integrated flat plate 23 dBi / 7°
Security and encryption	Connectorised: 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
	Up to 200 km (124 miles)***
	Integrated and Connectorised: Up to 43 Mbps at the Ethernet; dynamically variable with modulation range from 3.0 Mbps to 43 Mbps (aggregate)
	Integrated and Connectorised Lite: Up to 21 Mbps at the Ethernet; dynamically variable with modulation range from 1.5 Mbps to 21 Mbps (aggregate)
	Proprietary scrambling mechanism; optional FIPS-197 compliant 128-Bit AES Encryption
	* Regulatory conditions for RF bands should be confirmed prior to system purchase
	** Gain and maximum transmit power may vary based on regulatory domain
	*** In all cases the range limit is set by the latest software release
Ethernet Bridging	
Protocol	IEEE 802.3
Packet prioritisation	IEEE 802.1p
Interface	10 BASE-T / 100 BASE-T (RJ-45)–auto MDI/MDIX switching
Latency	Throughput Mode: Less than 7 mSec (default)
	Latency Mode: Less than 6 mSec
Management & Installation	
LED indicators	Power status, Ethernet link status and activity
System management	Web Server and SNMP; Canopy® Prizm
Installation	Built-in audio assistance for link optimisation
Connection	Distance between outdoor unit and primary network connection: up to 100 metres (330')
Physical	
Dimensions	Integrated Outdoor Unit (ODU): Width 370 mm (14.5"), Height 370 mm (14.5"), Depth 95 mm (3.75")
	Connectorised ODU: Width 305 mm (12"), Height 305 mm (12"), Depth 105 mm (4.1")
	Powered indoor unit (PIDU Plus): Width 250 mm (9.75"), Height 40 mm (1.5"), Depth 80 mm (3")
Weight	Integrated ODU: 5.5 kg (12.1 lbs) including bracket
	Connectorised ODU: 4.3 kg (9.1 lbs) including bracket
	PIDU Plus: 864 g (1.9 lbs)
Wind speed	242 kph (150 mph)
Power supply	Integrated with Indoor Unit
Power source	90–240 VAC, 50–60 Hz / 36-60V DC
Power consumption	55 W max
Environmental & Regulatory	
Operating temperature	-40°C (-40°F) to +60°C (+140°F), including solar radiation
Protection and safety	IP65/ UL60950; IEC60950; EN60950; CSA-C22.2 No. 60950
Radio	5.8 GHz: FCC Part 15, sub-part C 15.247, Eire ComReg 03/42, UK Approval to IR2007
	5.4 GHz: EN 301 893
EMC	USA–FCC Part 15, Class B; Europe–EN 301 489-4

