

MOTO*wi*⁴

Motorola Point-to-Point Bridges – PTP 400 Series



**Motorola PTP 58400 Bridges
5.8 GHz Part Numbers**

- BP5730BH-2BB Integrated
- BP5730BHC-2BB Connectorized
- BP5730BH20-2BB Integrated Lite
- BP5730BHC20-2BB Connectorized Lite

**Motorola PTP 54400 Bridges
5.4 GHz Part Numbers**

- BP5430BH-2AA Integrated
- BP5430BHC-2AA Connectorized
- BP5430BH20-2AA Integrated Lite
- BP5430BHC20-2AA Connectorized Lite

**Motorola PTP 49400 Bridges
4.9 GHz Part Numbers**

- WB2623 Integrated
- WB2624 Connectorized
- WB2627 Integrated Lite
- WB2628 Connectorized Lite

High Availability Wireless Ethernet Bridges

Operating in the 5.8 GHz, 5.4 GHz and 4.9 GHz (public safety) bands at data rates up to 43 Mbps, Motorola’s PTP 400 Series solutions 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 **MOTO**wi4™ portfolio of innovative wireless broadband solutions that create, complement and complete IP networks. Delivering IP coverage to virtually all spaces, the **MOTO**wi4 portfolio includes Fixed Broadband, WiMAX, Mesh, and Broadband over Powerline solutions for private and public networks.

Technical Specifications for the MOTOROLA POINT-TO-POINT BRIDGES – 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 | 5.8 and 5.4 GHz: 12 MHz 4.9 GHz: 10 MHz |
| Channel selection/ dynamic frequency control | By <i>Intelligent</i> Dynamic Frequency Selection (iDFS) 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 | 5.8 and 5.4 GHz Integrated: Varies with modulation mode; up to 168 dB with 23.5 dBi integrated antenna** 4.9 GHz Integrated: Varies with modulation mode; up to 163 dB** Connectorized: 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 | Integrated: Integrated flat plate 23 dBi / 7° Connectorized: 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 | 5.8 and 5.4 GHz: Up to 43 Mbps at the Ethernet; dynamically variable with modulation range from 3.0 Mbps to 43 Mbps (aggregate) 5.8 and 5.4 GHz Lite: Up to 21 Mbps at the Ethernet; dynamically variable with modulation range from 1.5 Mbps to 21 Mbps (aggregate) 4.9 GHz: Up to 35 Mbps at the Ethernet 4.9 GHz Lite: Up to 17 Mbps at the Ethernet |
| Security and encryption | Proprietary scrambling mechanism; optional AES 128 Bit 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 | REMARKS |
| Protocol | IEEE 802.3 |
| Packet prioritization | 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 | 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 | Integrated outdoor unit (ODU): Width 14.5" (370 mm), Height 14.5" (370 mm), Depth 3.75" (95 mm) Connectorized ODU: Width 12" (305 mm), Height 12" (305 mm), Depth 4.1" (105 mm) Powered indoor unit (PIDU Plus): Width 9.75" (250 mm), Height 1.5" (40 mm), Depth 3" (80 mm) |
| Weight | Integrated ODU: 12.1 lbs (5.5 kg) including bracket Connectorized ODU: 9.1 lbs (4.3 kg) including bracket PIDU Plus: 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 | 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 4.9 GHz: FCC Part 90 |
| EMC | USA–FCC Part 15, Class B; Europe–EN 301 489-4 |



For more information about the Motorola Point-to-Point Solutions:

Outside of North America: +44 1364 655500

In North America: +1 877 515-0400

www.motorola.com/ptp