



# PTP 49400

## Motorola 4.9 GHz Point-to-Point Bridges



### Technology Serving Public Safety Agencies

Operating in the 4.9 GHz band at data rates up to 35 Mbps, Motorola's PTP 49400 Point-to-Point Wireless Ethernet Bridges provide public safety officials with high-bandwidth, super-reliable connectivity for voice, video and data communications. The systems provide 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. (Regulatory conditions for the 4.9 GHz band should be confirmed prior to system purchase.)

PTP 49400 bridges can be implemented as a stand-alone solution or integrated with other Motorola wireless systems. When integrated with other Motorola systems, the PTP 49400 bridges can support an end-to-end solution for emergency response teams on the move. By seamlessly

rolling broadband wireless into two-way radio or cellular communications, Motorola's integrated solution enables seamless, uninterrupted access to information for a variety of public safety applications.

PTP 49400 bridges are incorporated into 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 49400 Bridges 4.9 GHz Part Numbers

WB2623 Integrated  
WB2624 Connectorized  
WB2627 Integrated Lite  
WB2628 Connectorized Lite

## TECHNICAL SPECIFICATIONS

### Technical Specifications for the Motorola 4.9 GHz Point-To-Point Bridges – PTP 400 Series

Radio Technology	Remarks
RF band	4.940 GHz–4.990 GHz*
Channel raster	4945, 4955, 4965, 4975, 4985 MHz; <i>i</i> -DFS or manual
Channel size	10 MHz
Channel selection/ dynamic frequency control	By <i>intelligent</i> Dynamic Frequency Selection ( <i>i</i> -DFS) or manual intervention
Transmit power	Adaptive, varying between 23 dBm and -10 dBm according to modulation selected and radio path**
EIRP	Integrated: ≤ 45 dBm
System gain	Integrated: Between 163 and 134 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
Antenna: type/gain/B/W	Integrated: Integrated flat plate 22 dBi / 8° 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	Integrated and Connectorized: Up to 35 Mbps at the Ethernet Integrated and Connectorized Lite: Up to 17 Mbps at the Ethernet
Security and encryption	Proprietary scrambling mechanism; optional AES 128-Bit Encryption; FIPS-197 compliant
	* 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
<b>Ethernet Bridging &amp; T1/E1</b>	
Protocol	IEEE 802.3
Packet prioritization	IEEE 802.1p
Interface	10 BASE-T / 100 BASE-T (RJ-45)–auto MDI/MDIX switching
Latency	5 ms typical
T1/E1	Via external multiplexer
<b>Management &amp; Installation</b>	
LED indicators	Power status, Ethernet link status and activity
System management	Web Server and SNMP; Canopy® Prizm
Installation	Built-in audio assistance for link optimization
Connection	Distance between outdoor unit and primary network connection: up to 330' (100 meters)
<b>Physical</b>	
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 source	90–240 VAC, 50–60 Hz / 36-60V DC
Power consumption	40 W typical
<b>Environmental &amp; Regulatory</b>	
Operating temperature	-40°F (-40°C) to +140°F (+60°C), including solar radiation
Protection and safety	UL60950; IEC60950; EN60950; CSA-C22.2 No. 60950
Radio	FCC Part 90

