PTP 500 Series systems can create a powerful wireless network for today’s businesses and government agencies, while delivering the communications agility they need to achieve their goals.

Our Point-to-Point (PTP) 500 Series Wireless Ethernet Bridges are excellent choices when your requirements call for mid-range throughput with carrier-class performance. Operating in the 5.4 and 5.8 GHz bands at Ethernet data rates up to 105 M bps and distances up to 155 miles (250 km), our PTP 500 systems are designed for virtually any environment: non-line-of-sight (NLOS), long-range line-of-sight (LOS), high interference, water crossings and desert.

Through our unique combination of technologies, PTP 500 Series bridges deliver the throughput, reach, security and reliability that today’s businesses and government agencies require for applications such as high-speed wireless backhaul, campus connectivity, leased-line replacement, backbone operations, network redundancy, Voice-over-IP, video surveillance, telemedicine, disaster recovery and emergency services.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL NUMBER</td>
<td>5.4 GHz: C054050B001 through C054050B008  5.8 GHz: C058050B001 through C058050B008</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>SPECTRUM</th>
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</thead>
<tbody>
<tr>
<td>FREQUENCY RANGE</td>
<td>5.4 GHz: 5470 - 5725 MHz  5.8 GHz: 5725 - 5875 MHz</td>
</tr>
<tr>
<td>CHANNEL WIDTH</td>
<td>Configurable to 5, 10 or 15 MHz</td>
</tr>
<tr>
<td>CHANNEL SELECTION</td>
<td>Intelligent Dynamic Frequency Selection (i-DFS) or manual intervention; automatic selection on start-up and continual adaptation to avoid interference</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>INTERFACE</th>
<th></th>
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<tbody>
<tr>
<td>STANDARD PROTOCOL</td>
<td>IEEE 802.3</td>
</tr>
<tr>
<td>DUPLEX SCHEME</td>
<td>5.4 GHz: Symmetric Fixed TDD; same frequency Tx/Rx  5.8 GHz: Symmetric Fixed TDD; same or split frequency Tx/Rx where regulations permit</td>
</tr>
<tr>
<td>INSTALLATION</td>
<td>Built-in audio and graphical assistance and voltage output for link optimization; LED indicators for power status, Ethernet link status and activity</td>
</tr>
<tr>
<td>ETHERNET INTERFACE</td>
<td>10 / 100 Base T (RJ-45) – auto MDI/M DIX</td>
</tr>
<tr>
<td>NETWORK MANAGEMENT</td>
<td>Web GUI or SNMP v1/v2c/v3 using MIBII and a proprietary PTP MIB; Wireless Manager 3.0 or higher</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERFORMANCE</th>
<th></th>
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<tbody>
<tr>
<td>RANGE</td>
<td>Up to 155 miles (250 km)</td>
</tr>
<tr>
<td>MAXIMUM AGGREGATE THROUGHPUT</td>
<td>25 M bps at the Ethernet (aggregate)  Upgradeable to 52 M bps and 105 M bps</td>
</tr>
<tr>
<td>LATENCY</td>
<td>&lt;3 ms average each direction</td>
</tr>
<tr>
<td>ERROR CORRECTION</td>
<td>FEC</td>
</tr>
<tr>
<td>QUALITY OF SERVICE</td>
<td>802.1p (8 levels)</td>
</tr>
<tr>
<td>MODULATION TYPE</td>
<td>Dynamic; adapting between BPSK and 64 QAM</td>
</tr>
</tbody>
</table>
## SPECIFICATIONS

### LINK BUDGET

**TRANSMIT POWER**
- Varies with modulation mode and settings from -18 dBm to 27 dBm

**ANTENNA BEAM WIDTH**
- Integrated: 8° azimuth and elevation
- Connectorized: Can operate with a selection of separately-purchased single and dual polar antennas (check local regulations prior to purchase)

**ANTENNA GAIN**
- Integrated: 23 dBi Flat Plate
- Connectorized: N/A

**SENSITIVITY (dBm typical)**
- Adaptive, varying between -94 dBm and -69 dBm

### PHYSICAL

**ANTENNA CONNECTION**
- Integrated: N/A
- Connectorized: 2 x N-type female connectors

**SURGE SUPPRESSION**
- Lightning protection built into ODU; PTP-LPU (Lightning Protection Unit) still required on building ingress

**TEMPERATURE**
- -40°F to +140°F (-40°C to +60°C), including solar radiation

**WEIGHT**
- Integrated ODU: 11.8 lbs (5.35 kg) including bracket
- Connectorized ODU: 10.4 lbs (4.7 kg) including bracket
- PIDU Plus: 1.9 lbs (864 g)

**WIND SURVIVAL**
- 202 mph (325 kph)

**DIMENSIONS (HxWxD)**
- Integrated ODU: 37 x 37 x 9.5 cm (14.5" x 14.5" x 3.75")
- Connectorized ODU: 31 x 31 x 10.5 cm (12.2" x 12.2" x 4.1")
- Powered Indoor Unit (PIDU Plus): 4 x 25 x 8 cm (1.5" x 9.75" x 3")

**MAXIMUM POWER CONSUMPTION**
- 50 W

**INPUT VOLTAGE**
- 90 - 240 VAC, 50 - 60 Hz / 36 - 60 VDC; redundant powering configurations supported

### SECURITY

**ENCRYPTION**
- Proprietary scrambling mechanism; optional FIPS- 197 compliant 128/256-bit AES Encryption

**CERTIFICATIONS**

**FCC ID**
- 5.4 GHz: QWP54500
- 5.8 GHz: QWP58500

**INDUSTRY CANADA CERT**
- 5.4 GHz: 109A0-54500
- 5.8 GHz: 109A0-58500

**CE**
- 5.4 GHz: EN 301 893
- 5.8 GHz: EN 302 502

**PROTECTION AND SAFETY**
- UL 60950, IEC 60950, EN 60950, CSA-22.2 No. 60950

**EMC**
- CFR 47 Part 15 Class B, CSA Std C108.8 1993 Class B, EN 55022 CISPR 22, EN 301 489-4