The Motorola Wireless Broadband Point-to-Multipoint (PMP) 54430 Access Point and Subscriber Module is the ideal solution for developing, enhancing and extending advanced broadband networks with more than 45 Mbps of total aggregate throughput for data transfer, voice and video applications. The PMP 54430 Access Point and Subscriber Module provide wireless Line of Sight (LOS) and near Line of Sight (nLOS) broadband connectivity in the 5.4 GHz spectrum.

Motorola Wireless Broadband products combine field-proven toughness with exceptional performance, security, ease-of-use and cost effectiveness. PMP 54430 Series Access Point and Subscriber Modules are available with total throughputs greater than 40 Mbps for data, video and voice applications. PMP 54430 Subscriber Modules can be purchased with throughputs of 4, 10, 20 or 40 Mbps and throughput can be enhanced to existing modules via a fixed software license.

The PMP 54430 Access Point can be co-located on the same tower location with other Motorola PMP Access Point solutions. The user guide provides details on co-location planning and network design considerations.

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### FEATURE SPECIFICATION

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>AP SPECIFICATION</th>
<th>SM SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL NUMBER</td>
<td>5480AP, 5480APC, 5480APUS, 5480APCUS</td>
<td>5490SM4, 5490SM10, 5490SM20, 5490SM40</td>
</tr>
<tr>
<td>PART NUMBER</td>
<td>5480CAA</td>
<td>5490AA, 5494AA</td>
</tr>
<tr>
<td>FREQUENCY RANGE</td>
<td>5470 - 5725 MHz</td>
<td></td>
</tr>
<tr>
<td>CHANNEL WIDTH</td>
<td>Configurable on 2.5 MHz increments for 5 MHz Channel</td>
<td>Configurable on 5 MHz increments for 10 and 20 MHz Channels</td>
</tr>
<tr>
<td>CHANNEL SPACING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANTENNA GAIN</td>
<td>17 dBi (w/ included sector antenna)</td>
<td>10 dBi</td>
</tr>
<tr>
<td>TRANSMIT POWER (NOTE 1)</td>
<td>-30 to +21 dBm (to EIRP limit by region)</td>
<td>Auto transmit power control up to EIRP limit</td>
</tr>
<tr>
<td>MAX TRANSMIT POWER</td>
<td>21 dBm</td>
<td>19 dBm</td>
</tr>
<tr>
<td>EIRP</td>
<td>30 dBm FCC, ETSI (20MHz)</td>
<td>30 dBm FCC, ETSI (20MHz)</td>
</tr>
<tr>
<td></td>
<td>27 dBm FCC, ETSI (10MHz)</td>
<td>27 dBm FCC, ETSI (10MHz)</td>
</tr>
<tr>
<td></td>
<td>24 dBm FCC, ETSI (5MHz)</td>
<td>24 dBm FCC, ETSI (5MHz)</td>
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<tr>
<td>ANTENNA BEAM WIDTH</td>
<td>4 sector application</td>
<td>55° horizontal</td>
</tr>
<tr>
<td></td>
<td>(actual 3 dB antenna pattern: 60° horizontal</td>
<td>55° elevation</td>
</tr>
<tr>
<td></td>
<td>5° elevation; null fill)</td>
<td>3 dB antenna pattern</td>
</tr>
<tr>
<td>ANTENNA CONNECTION</td>
<td>50 ohm N-type</td>
<td>N/A</td>
</tr>
</tbody>
</table>
## Feature | AP Specification | SM Specification
---|---|---
**Modulation Levels (Adaptive)** | 1X=QPSK, 2X=16QAM, 3X=64QAM | CSM 54430
**Forward Error Correction** | 1/4 Reed-Solomon block coding | 
**Physical Layer** | OFDM 256FFT | 
**MAC (Media Access Control) Layer** | Motorola Proprietary | 
**Cyclic Prefix** | 1/4, 1/8 or 1/16 fixed | 
**PPS** | 15,000 | 4,800
**GPS Synchronization** | Yes | 
**# of Subscribers per Sector** | Up to 200 | N/A
**ARQ** | Yes | 
**Quality of Service** | DiffServ QoS | 
**Maximum Deployment Range (W/ Reflector Dish on SM, LOS)** | 1X: 30 mi. (48 km), 2X: 30 mi. (48 km), 3X: 11 mi. (16 km) | 
**Maximum Aggregate (Up+Down) Throughput per Sector (@5MHz Channel)** | 1X: 3.5 Mbps, 2X: 7 Mbps, 3X: 10.5 Mbps | 
**Maximum Aggregate (Up+Down) Throughput per Sector (@10MHz Channel)** | 1X: 8 Mbps, 2X: 16.5Mbps, 3X: 24.5Mbps | 
**Maximum Aggregate (Up+Down) Throughput per Sector (@20MHz Channel)** | 1X: 16.5 Mbps, 2X: 32 Mbps, 3X: >45 Mbps | 
**Latency** | 5-7 ms round trip | 
**Encryption** | DES, FIPS 197 Certified AES Option | 
**Nominal Receive Sensitivity (W/ FEC) @ 5 MHz Channel** | 1X: -93 dBm, 2X: -86 dBm, 3X: -79 dBm | 
**Nominal Receive Sensitivity (W/ FEC) @ 10MHz Channel** | 1X: -90 dBm, 2X: -83 dBm, 3X: -76 dBm | 
**Nominal Receive Sensitivity (W/ FEC) @ 20MHz Channel** | 1X: -87 dBm, 2X: -80 dBm, 3X: -73 dBm | 
**Ethernet Interface** | 10/100BaseT, half/full duplex, rate auto negotiated (802.3 compliant) | 
**Protocols Used** | IPv4, UDP, TCP, IP, ICMP, Telnet, SNMP, HTTP, FTP | 
**Network Management** | HTTP, Telnet, FTP, SNMPv2c | 
**VLAN** | 802.1ad (Q-in-Q), 802.1Q with 802.1p priority, dynamic port VID | 
**CE** | EN300 502 v1.2.1 | 
**Temperature** | -40°C to +55°C (-40°F to +131°F) | 
**Wind Survival** | 190 km/hour (118 mi/hour) | 
**Wind Loading** | 90 lbs. | 
**Dimensions (H x W x D)** | 71 x 21 x 28 cm (28.75" x 8.25" x 11") | 
**Weight** | 6.1 kg (13.5 lbs.) (w/ antenna) | 
**Max Power Consumption** | 19W | 
**Input Voltage** | 24 to 59 V | 
**Collocation with PMP 52100** | Yes | 
**Collocation with PMP 54100** | Yes, 10MHz guard band separation or 5MHz with 3 ft vertical required; synchronization required | 
**Collocation with PMP 54400** | Interoperable when using 10 MHz channel and 1/4 cyclic prefix | 
**Collocation with PMP 58100** | Yes |