


# 11ax 3000Mbps Ceiling Wireless AP

## OVERVIEW

The AIR-AP530R2 is a high-power WiFi 6 (802.11ax) Ceiling Mount Wireless Access Point powered by a Qualcomm chipset. It is designed to support MU-MIMO, Wave 2.0, OFDMA, and Seamless Roaming, making it ideal for high-density environments such as university campuses, office buildings, and public venues.

With dual-band connectivity, the AP530 provides a combined 3000Mbps Wi-Fi speed over 2.4GHz (600Mbps) and 5GHz (2400Mbps). The inclusion of 2.5Gbps WAN & LAN ports ensures high-speed wired connectivity without bottlenecks.

Appearance	Description
	<ul style="list-style-type: none"><li>• <b>High-Speed Connectivity:</b> Wireless data rate up to 3000Mbps</li><li>• <b>1024-QAM Modulation:</b> Enables high-speed applications such as VR/AR and 8K streaming</li><li>• <b>Target Wake-Up Time (TWT):</b> Reduces device power consumption by scheduling transmissions</li><li>• <b>Extended Wi-Fi Coverage:</b> Supports long OFDM symbol transmission for improved signal reliability</li><li>• <b>Enhanced Anti-Interference:</b> BSS Color Bit &amp; Dynamic CCA-SD for reducing congestion in multi-user environments</li></ul>

## TECHNICAL SPECIFICATIONS

### Hardware Specifications:

- **Model:** AIR-AP530-R2
- **Wireless Standard:** 802.11ax/ac/b/g/n
- **Frequencies:**
  - 2.4GHz: 802.11b/g/n/ax (2.4GHz – 2.484GHz)
  - 5.8GHz: 802.11a/n/ac/ax (5150MHz – 5850MHz)
- **Interfaces:**
  - 1 × 10/100/1000/2500Mbps RJ45 WAN Port
  - 1 × 10/100/1000Mbps RJ45 LAN Port
  - 1 × Reset Button
  - 1 × Blue-tooth (Optional)
  - 1 × DC Power Port
- **Antenna:** IPEX Connector, 4 × 4dBi Dual-Band Omni Antennas
- **Max Supported Users:** 200+
- **RF Power:**
  - 2.4GHz: ≤ 20dBm
  - 5.8GHz: ≤ 19dBm
- **Power Input:**
  - PoE (IEEE 802.3at+): 48V
  - DC Adapter: 12V/2A
- **Max Power Consumption:** ≤ 22W
- **Device Dimensions:** 198mm × 198mm × 41mm

## TECHNICAL SPECIFICATIONS

### Firmware & Management Features:

- Operating Modes: Gateway, AP
- SSID Management:
  - Multiple SSIDs (4 for 2.4GHz, 4 for 5GHz)
  - SSID Hiding & Seamless Roaming (802.11kvr standard)
- Security:
  - Open, WPA, WPA2-PSK (TKIP/AES), WPA2-EAP, 802.1x Authentication
  - MAC Filtering & Client Isolation
  - Wi-Fi Scheduling: Configure time-based activation for power saving
  - User Management: Max 64 users per band
- Networking:
  - VLAN Configuration
  - Backup & Restore Configuration
  - Factory Reset Support
- Device Management:
  - Remote & Controller Management
  - Admin Password Modification
  - Scheduled or Manual Reboot
  - GUI-based Web Management & AC Controller Support

### Antenna Specifications:

- Frequency Range: 2.4GHz & 5.8GHz
- Impedance: 50 Ohms nominal
- Gain: 4dBi
- Radiation: Omni
- Polarization: Vertical

### Package Contents:

- AIR-AP530-R2 11ax 3000Mbps Ceiling Wireless Access Point
- Ethernet Cable
- Quick Installation Guide
- Mounting Accessories

### Environmental Conditions:

- Operating Temperature: -20°C to 45°C
- Storage Temperature: 0°C to 70°C
- Humidity: 5% - 95% (non-condensing)