

Cisco Catalyst CW9176I

WI-FI 7 DATASHEET

Next-Gen Wi-Fi 7 (802.11be) Flagship Access Point (CW9176I-ROW)

Product Overview: The Cisco Catalyst CW9176I Access Point is Cisco's premier enterprise Wi-Fi 7 (802.11be) indoor access point. Delivering up to 18 Gbps aggregate throughput with 320 MHz channels, 4096-QAM, Multi-Link Operation (MLO), Ultra-Wideband (UWB), and an integrated 10 Gbps Multigigabit uplink, it offers industry-leading performance for mission-critical wireless environments.

KEY CAPABILITIES & FEATURES

Wi-Fi 7 (802.11be) Innovation

- **Massive Data Speed:** Aggregate tri-radio throughput up to 18 Gbps.
- **320 MHz Channel Width:** Double the channel bandwidth on the 6 GHz band.
- **Multi-Link Operation (MLO):** Simultaneous multi-band transmission for ultra-low latency.
- **4096-QAM Modulation:** 20% higher peak transmission rates over Wi-Fi 6E.

Dual Management Operating Modes

- **Cisco Meraki Cloud:** Zero-touch provisioning, cloud intelligence, and intuitive management.
- **Cisco Catalyst Controller:** Full-featured enterprise control via Catalyst WLC & Catalyst Center.
- **Operational Agility:** Migrate management engines on demand without hardware changes.

Integrated Location & IoT Architecture

- **Ultra-Wideband (UWB):** Precision sub-meter indoor positioning and asset tracking.
- **GNSS / GPS Receiver:** Native location lock for AFC compliance and exact site mapping.
- **BLE 5.3 & 802.15.4 (Zigbee):** Comprehensive IoT gateway support for smart facilities.

Next-Gen Security & Hardware

- **10G Multigigabit Uplink:** 1x 100M/1G/2.5G/5G/10G RJ-45 uplink for bottleneck-free backhaul.
- **Dedicated Scanning Radio:** 24x7 tri-band security scanning (CleanAir Pro / WIPS).
- **WPA3 Encryption:** 192-bit enterprise security suite across all frequency bands.

HARDWARE SPECIFICATIONS

Parameter	Specification
Model Number	CW9176I-ROW (Rest of World Regulatory Domain)
Wireless Standard	IEEE 802.11be (Wi-Fi 7), backward compatible with 802.11a/b/g/n/ac/ax
Spatial Streams	12 Streams: 4x4:4 on 2.4 GHz, 4x4:4 on 5 GHz, 4x4:4 on 6 GHz
Ethernet Uplink	1x 100M / 1G / 2.5G / 5G / 10G Multigigabit Ethernet (RJ-45)

INTERFACE & PHYSICAL OVERVIEW



CW9176I Rear Ports and Interface View

Figure 1: Rear interface layout showing 10G Multigigabit RJ-45 uplink, Console, USB, and DC Power input ports.

POWER REQUIREMENTS & OPERATING MODES

Power Source	Functional Level	Operational Notes
802.3bt (PoE++ / Class 6)	Full Functionality	All 3 radios active (4x4 on all bands), 10GbE enabled, USB port fully powered (9W max).
802.3at (PoE+)	Reduced Functionality	4x4 mode on 5G/6G; 2.4G reduced or disabled; USB power output capped or disabled.
802.3af (PoE)	Not Supported	802.3af does not supply sufficient power for AP operation.
DC Power Input	Full Functionality	54V DC direct power adapter option.

PHYSICAL & ENVIRONMENTAL SPECIFICATIONS

Metric	Details
Dimensions (W x L x H)	24.1 cm x 24.1 cm x 5.1 cm (9.5 in. x 9.5 in. x 2.0 in.)
Weight	1.56 kg (3.4 lbs)
Integrated Telemetry	Environmental Temperature, Relative Humidity, and Accelerometer sensors
Operating Temperature	0°C to 50°C (32°F to 122°F)
Non-Operating Temp.	-30°C to 70°C (-22°F to 158°F)
System Memory	4 GB DRAM / 2 GB Flash Memory

REGULATORY & REGIONAL COMPLIANCE (-ROW)

Rest of World Domain (-ROW): The **CW9176I-ROW** model is designed for global enterprise deployments outside North America and Europe. It dynamically tunes 6 GHz Wi-Fi 7 channel availability, 320 MHz spectrum authorization, and EIRP transmit power levels in compliance with local country regulatory mandates.