



/ DATA SHEET

Celona 5G indoor access point AP 24

The plug-and-play Celona Orion 5G NR access point – pervasive indoor coverage across a wide range of global 5G NR bands, with internal or external antenna support and deterministic performance for business-critical enterprise applications.



/ AT A GLANCE

WIRELESS TYPE	Integrated Private 5G NR
DEPLOYMENT	Indoor
BAND	n48, n77, n78, n79 (3.4–4.2, 4.5–4.9 GHz)
HAZARDOUS ENVIRONMENTS	Not rated
IP RATING	IP50
AERFLEX	Planned – future SW release (AP24-48/77/78H)

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01 Overview

The AP 24 is the plug-and-play indoor access point in the Celona Orion platform – a fully integrated 5G NR access point delivering deterministic, enterprise-grade wireless performance across a wide range of global 5G NR bands (n48, n77, n78, n79) spanning 3.4–4.2 and 4.5–4.9 GHz. Bringing the speed, security, and reliability of 5G NR to enterprises across industries, it was engineered to deliver pervasive indoor cellular coverage across enterprise environments – warehouses, retail stores, manufacturing plants, hospitals, and offices – with support for both internal and external antennas on select models. Powered by CelonaOS, it delivers deterministic performance for business-critical applications and enables AerFlex – AP-only, controller-less deployments with zero on-site infrastructure. Ultra-low latency under 10 ms enables applications like wireless PLCs and PROFINET.

02 Key benefits

An integrated private 5G NR access point powered by CelonaOS, purpose-built for indoor enterprise environments – IP-50 rated with dust protection and IEEE 802.3bt Type 3 PoE++ for seamless integration with existing network infrastructure. Operating across global 5G NR bands from 3.4–4.2 and 4.5–4.9 GHz with support for internal or external antennas, it delivers fewer components, zero-touch provisioning, self-organizing spectrum management, and an integrated PTP timing source – no external timing equipment required.

Global indoor Private 5G platform

Supports n48, n77, n78 and n79 on a common indoor hardware platform, simplifying global deployments, inventory management and product standardization.

High-Performance RF architecture

Advanced 2x2 MIMO RF design with excellent receiver sensitivity and a choice of integrated or external antenna models, enabling optimized coverage, directional RF designs, flexible antenna placement and stronger cell-edge performance.

Enterprise-Grade security

Secure boot, hardware root of trust, TPM and certificate-based authentication help protect the access point throughout its operational lifecycle.

PoE++ enterprise integration

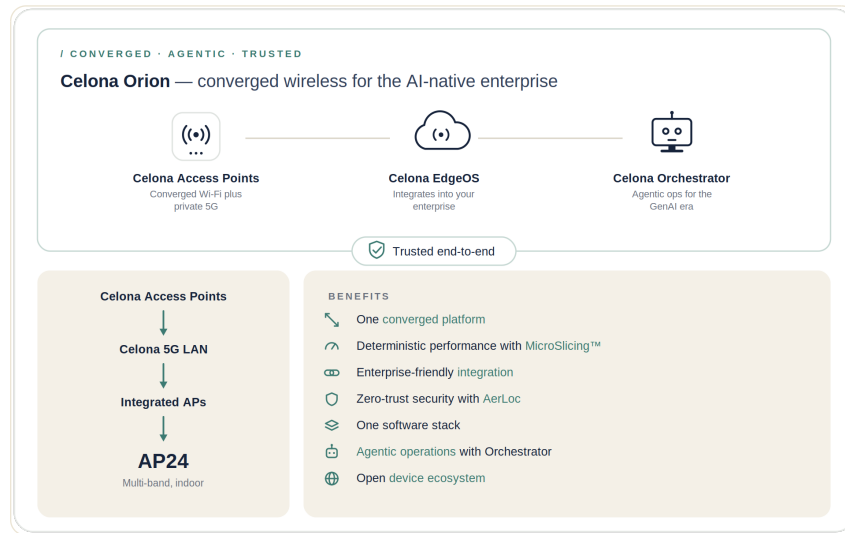
Powered through IEEE 802.3bt PoE++ and designed to connect directly to compatible enterprise switching infrastructure, reducing the need for separate power equipment, additional cabling and installation complexity.

Flexible deployment

Supports Celona Edge, Virtualized Edge and AerFlex™ deployment architectures, with integrated and external antenna options and flexible ceiling or wall mounting for a broad range of indoor environments.

03 Celona Orion platform

Celona Orion is converged wireless for the AI-native enterprise – one platform spanning radio, core networking, and AI-powered management. It brings 5G performance, reliability, and deterministic QoS into enterprise and industrial environments, designed specifically for enterprise integration and AI-driven operations.



Celona SIM + AerConnect

Device identity and intelligence

Celona Access Points

Wi-Fi + private 5G as one system

Celona EdgeOS

Integrates into your enterprise

Celona Orchestrator AI

Agentic ops for the GenAI era

04 Specifications

HIGH LEVEL

Type	5G Indoor Access Point (3GPP Rel. 15 TDD)
RF Specifications	2×2 MIMO UL/DL, up to 256 QAM
Power (Rx/Tx)	Up to 24 dBm max per port
Channel Bandwidth	AP24-79: 60, 100 MHz. AP24-48/77/78H: 20, 40, 60, 100 MHz
Latency	<10 ms one-way (device to Celona Edge)
Connected Devices	128 active (concurrent)
Dimensions (W×D×H)	250 × 250 × 65 mm / 9.8 × 9.8 × 2.6 in
Weight	2.5 kg (5.5 lbs)
Environmental	Operating: -5°C to +45°C / Storage: -10°C to +50°C / Humidity: 5-90% non-condensing
Power Interface Lightning Protection	Not applicable (indoor)
Surge Protection	Yes
Installation	Wall or ceiling mount
Power Consumption	51 W (maximum), 802.3bt Type 3 PoE++
MTBF	>70K hours

PORTS & INTERFACES

Network Interfaces	1× RJ-45 Ethernet interface (1/2.5 GE)
Antenna Interfaces	Built-in omni (max 6 dBi antenna gain). External antennas optional (add-on)
Power Supply	PoE injector (AC to PoE power, included in the AP package)
Timing	PTP grand master and IEEE 1588v2 PTP. Optional external GNSS antenna
LED Indicators	System / 5G

COMPLIANCE & FREQUENCY	
Certifications	AP24-79: TELEC; AP24-48/77/78H: FCC, CE
Frequency Band	AP24-79: 4.5-4.9 GHz (n79); AP24-48/77/78H: 3.5-4.2 GHz (n48, n77, n78)

05 What's in the box

Image placement is illustrative – confirmed during review. Six items ship with each unit.



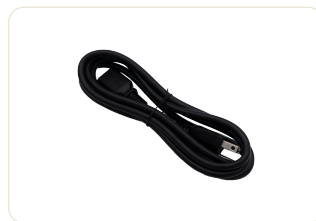
AP 24 indoor access point



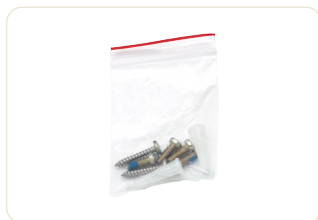
Clamps



PoE injector



Power cable



Mounting screws



Wall / ceiling mount

06 Ordering information

Celona Indoor AP 24 is included in the per-AP Celona private mobile network subscription, which scales with the number of access points in the network.

SKU	DESCRIPTION
C-S-5G-79-NN-X-3	3-year indoor 5G private wireless service subscription for one indoor access point including management, SIM provisioning, and mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes a 5G category A n79 (4500–4900 MHz) access point, Celona express technical support, limited lifetime warranty, and 20 private SIM cards.
C-S-5G-79-NN-X-5	5-year indoor 5G private wireless service subscription – same inclusions as the C-S-5G-79-NN-X-3 SKU.
CS-AP24-48-P5G-X-3	3-year indoor 5G private wireless service subscription for one AP24 indoor access point. Includes a 5G Category A AP24 supporting n48 (3550–3700 MHz) with integrated antennas and optional external antenna support, management, SIM provisioning, mobile core services via Celona Edge and Celona Orchestrator, Celona Express technical support, limited lifetime warranty, and 20 private 5G SIM cards.
CS-AP24-48-P5G-X-5	5-year indoor 5G private wireless service subscription – same inclusions as the CS-AP24-48-P5G-X-3 SKU.
CS-AP24-78H-P5G-X-3	3-year indoor 5G private wireless service subscription for one AP24 indoor access point — same inclusions as CS-AP24-48-P5G-X-3, with an AP24 supporting n78H (3550–3800 MHz).
CS-AP24-77-P5G-X-3	5-year indoor 5G private wireless service subscription — same inclusions as the CS-AP24-78H-P5G-X-3 SKU.
CS-AP24-78H-P5G-X-5	3-year indoor 5G private wireless service subscription for one AP24 indoor access point — same inclusions as CS-AP24-48-P5G-X-3, with an AP24 supporting n77 (3550–4200 MHz).
CS-AP24-77-P5G-X-5	5-year indoor 5G private wireless service subscription — same inclusions as the CS-AP24-77-P5G-X-3 SKU.
CN-ANT-OMNI-KIT	Omni-directional antenna, 3.3–3.8 GHz, 13 dBi, 360° horizontal. Kit includes 2 surge protectors and 2× 10-ft LMR400 cables.
CN-ANT-33D-KIT	33° sector antenna, 3.5–4.2 GHz, 18.8 dBi. Kit includes 2 surge protectors and 2× 10-ft LMR400 cables.
CN-ANT-65D-KIT	65° sector antenna, 3.3–3.8 GHz, 17 dBi. Kit includes 2 surge protectors and 2× 10-ft LMR400 cables.
CN-ANT-90D-KIT	90° sector antenna, 3.3–3.8 GHz, 16.7 dBi. Kit includes 2 surge protectors and 2× 10-ft LMR400 cables.

SKU	DESCRIPTION
CN-ANT-120D-KIT	120° sector antenna, 3.3–3.8 GHz, 14.5 dBi. Kit includes 2 surge protectors and 2× 10-ft LMR400 cables.
CN-ANT-90D-4P	4-port 90° sector antenna, 3.3–3.8 GHz, 17 dBi. Kit includes 4 surge protectors and 4× 10-ft LMR400 cables.
C-ANT-CBL-3-SMA-NM	3-ft RF coaxial cable, SMA Male to N Male, for AP24 external antenna deployments. Low-loss short-distance RF connectivity between the AP24 RF port and external antennas or RF components; used with Celona external antenna kits.

AerFlex™ AP-only mode will be enabled in a future software release on AP24-48/77/78H; not supported on AP24-79.

07 Warranty

C-S-5G-79-NN-X-5