

AP 25 – ruggedized outdoor access point

The ruggedized indoor/outdoor Celona Orion 5G NR access point – deterministic private 5G reach for industrial environments, oil refineries, ports, and large-scale campuses.



/ AT A GLANCE

WIRELESS TYPE	Integrated Private 5G NR
DEPLOYMENT	Indoor + Outdoor
BAND	n48 (3.55–3.7 GHz)
HAZARDOUS ENVIRONMENTS	C1D2 certified
IP RATING	IP66
AERFLEX	Supported

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01 Overview

The AP 25 is the ruggedized access point in the Celona Orion platform – bringing deterministic private 5G NR reach to the most demanding industrial environments. Bringing the speed, security, and reliability of 5G NR to enterprises across industries, it was engineered to deliver pervasive cellular coverage across massive, critical industrial and outdoor areas – oil refineries, shipping ports, manufacturing yards, and large-scale campus environments.

As an integrated access point, it connects directly to your IT network with fewer components. Powered by CelonaOS, it delivers deterministic performance for business-critical applications and supports AerFlex – AP-only deployments with zero on-site infrastructure. Ultra-low latency under 10 ms enables applications like wireless PLCs and PROFINET.

02 Key benefits

The AP 25 is an Integrated Private 5G NR access point powered by Celona's in-house stack, purpose-built for the harshest enterprise environments – indoor and outdoor, IP66-rated, and C1D2 certified for hazardous locations including chemical plants and Oil & Gas sites. Operating on band n48 (3.55–3.7 GHz) with AerFlex support, this integrated AP delivers fewer components, zero-touch provisioning, simpler installation, and a direct IT network connection – no additional hardware required for reliable industrial coverage.

Engineered advantages.

High-performance outdoor CBRS platform

Purpose-built for CBRS n48 private 5G deployments requiring reliable outdoor coverage, industrial-grade durability and flexible RF design.

Industrial-grade ruggedness

Features IP66 ingress protection and UL Class I Division 2 certification for demanding outdoor and hazardous industrial environments.

Advanced RF architecture

Delivers up to 37 dBm conducted transmit power per RF port with 2x2 MIMO and flexible external antenna support, enabling higher EIRP, extended coverage, optimized sectorization and fewer outdoor access points.

Carrier-class outdoor hardware

Engineered with integrated GNSS timing, industrial thermal design, secure hardware architecture and enterprise-grade components for reliable long-term outdoor operation.

Flexible deployment

Supports Celona Edge, Virtualized Edge and AerFlex™ deployment architectures, with DC power input, external antenna flexibility and pole or wall mounting for streamlined field installation.

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.

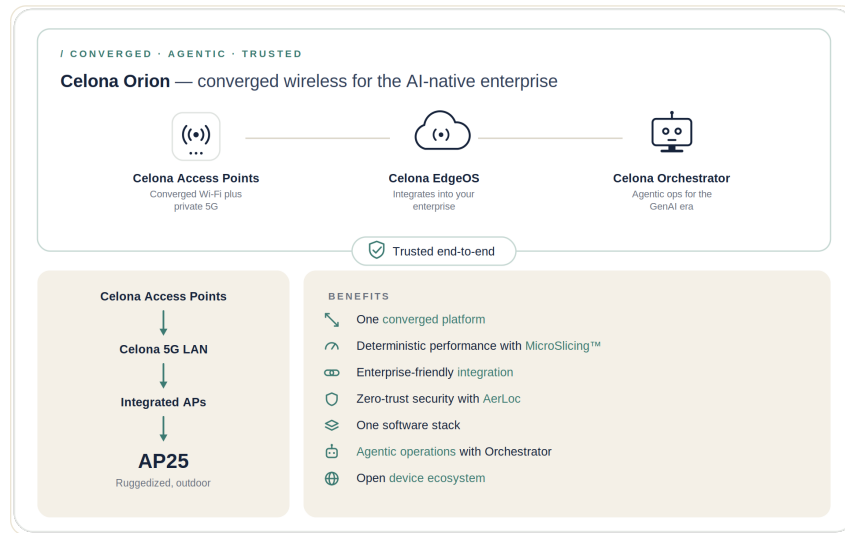


Figure 1 - Celona 5G LAN with AerFlex (AP-only)

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 Ruggedized Access Point (3GPP Rel. 15 TDD)
RF specifications	2×2 MIMO UL/DL, up to 256 QAM
Power (Rx/Tx)	Up to 37 dBm per port. External antennas supported.
Channel bandwidth	AP25-48: 20, 40 MHz
Latency	<10 ms one-way (device to Celona Edge)
Connected devices	128 active (concurrent)
Dimensions (W×D×H)	321 × 231 × 135 mm / 12.64 × 9.09 × 5.31 in
Weight	8.5 kg (18.7 lbs)
Environmental	Operating: -40°C to +55°C / Storage: -40°C to +70°C
IP rating	IP66
Power interface lightning protection	Differential: ±10KA / Common: ±20KA
Surge protection	Yes
Installation	Pole or wall mount
Power consumption	100 W (maximum)
MTBF	>150K hours
PORTS & INTERFACES	
Network interfaces	1× optical (SFP+) and 1× RJ-45 (1 GE)
Antenna interfaces	2× N-Type connectors
Power supply	±48V DC (AC adapter and surge protector included)
Timing	GPS (antenna included)
LED indicators	1× LED / Active
COMPLIANCE & FREQUENCY	
Certifications	AP25-48: FCC Cat A/B, Hazardous location CSA Class 1 Div 2
Frequency band	AP25-48: 3.55-3.7 GHz

05 What's in the box

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



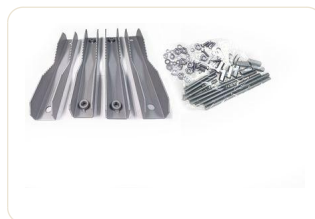
Power adapter – 48V DC +
surge protector



Optical Module – SFP, LC
dual-strand



M12 DC power cable



Mounting bracket & screws



C1D2 accessory kit – GPS &
IO covers



Waterproof connectors



Cold shrink tubes



GPS antenna & accessories



Power terminal connector



Grounding wire



GPS antenna



Power terminal bracket

06 Ordering information

Celona Outdoor AP 25 is included in the Celona private mobile network subscription, which scales with the number of access points in the network.

SKU	DESCRIPTION
CS-AP25-48-P5G-X-3	3-year outdoor 5G private wireless service subscription for one outdoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes 5G category B n48 (3550–3700 MHz) access point, Celona express technical support, limited lifetime warranty and 40 private SIM cards. Separate external antenna purchase required.
CS-AP25-48-P5G-X-5	5-year outdoor 5G private wireless service subscription – same inclusions as the 3-year SKU.
CS-AERFLEX-X-3	3-year add-on AerFlex service subscription for one access point – cloud-based control plane and AP-managed data plane. Includes Celona express technical support.
CS-AERFLEX-X-5	5-year add-on AerFlex service subscription – same inclusions as the 3-year SKU.
CS-AERFLEX-X-M	Monthly add-on AerFlex service subscription for one access point. Includes Celona express technical support.
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. One antenna required per AP.
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.
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.

07 Warranty

Limited lifetime warranty coverage for Celona Outdoor access points is included as part of an active Celona Private Mobile Network subscription.