

## DATA SHEET

# Celona Indoor Access Point AP 22

Enabling 5G NR cellular wireless connectivity for indoor environments, within a wide range of global 5G NR bands.

**AP 22** is a plug-and-play Private 5G access point. It delivers pervasive indoor coverage with deterministic performance for business-critical enterprise applications. Powered by **CelonaOS**, AP22 supports **AerFlex** - controller less deployments with zero on-site infrastructure.

celona

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## Celona Indoor AP 22

**Celona AP 22 is a fully integrated 5G NR indoor access point designed for enterprise private wireless environments.**

Bringing the speed, security, and reliability of 5G NR technology to enterprises and organizations across industries, Celona's AP 22 was purposely engineered to deliver pervasive cellular coverage in enterprise environments like warehouses, retail stores, manufacturing plants, hospitals, and offices. Ultra-low latency of < 10 msec can enable applications like wireless Programmable Logic Controllers (PLC), PROFINET.

### Key benefits of AP 22:

#### Support for Global Private Wireless spectrums

- Operates in 3.3–4.2 GHz frequency bands, supporting global private wireless deployments
- Transmit power configurability to comply with local regulatory and compliance requirements

#### Secure wireless communication

- Certificate based mutual authentication secures connection between AP and cloud
- Data at rest and in-transit secured by comprehensive encryption mechanisms
- Regular penetration tests of system components are conducted by 3rd party security labs

#### Enterprise friendly management and operations

- Out-of-the-box zero touch provisioning to bring up each AP in minutes without any manual touch
- Self-organizing spectrum management enables selection of the best bands for interference free operation
- Integrated PTP timing source eliminates the need for external timing equipment

#### Supports AerFlex AP-only deployment

- Cloud controlled, with local data break-out
- No on-site appliances, racks, custom cabling
- Distributed, space-constrained, or remote sites
- Supported on AP2X radios

#### Built for indoor ruggedized environments

- IP-52 rated and built for indoor ruggedized environments with dust protection
- Seamless integration with existing network infrastructure with IEEE 802.3bt Type 3 PoE++
- Flexible mounting options including T-bar, ceiling or wall mounts

#### Deterministic performance for mission critical applications

- Delivers predictable performance for mission critical apps via 5QI MicroSlicing™ with QoS enforcements on a per application flow
- Delivers up to 1 Gbps aggregate throughput (2x2 MIMO, up to 256 QAM modulation, sub-carrier space of 30 KHz) and supports various uplink/downlink slot configurations
- Operates in channel bandwidth of up to 100 MHz
- One-way application latency of less than 10ms (device to edge)
- Engineered for predictable high-speed mobility (>25 mph) of devices between access points

## Celona 5G LAN

Celona 5G LAN is a turnkey private wireless solution that brings the benefits of 5G—high performance, reliability, and deterministic QoS—into enterprise and industrial environments. Unlike traditional telco architectures, it's designed specifically for enterprise integration and AI-driven operations.

## Celona Edge

Celona Edge offers flexible deployment options—run locally on dedicated appliances or virtual infrastructure, or use Celona AerFlex for cloud-controlled deployments at distributed, space-constrained, or remote sites with AP-only infrastructure.

## Celona Orchestrator

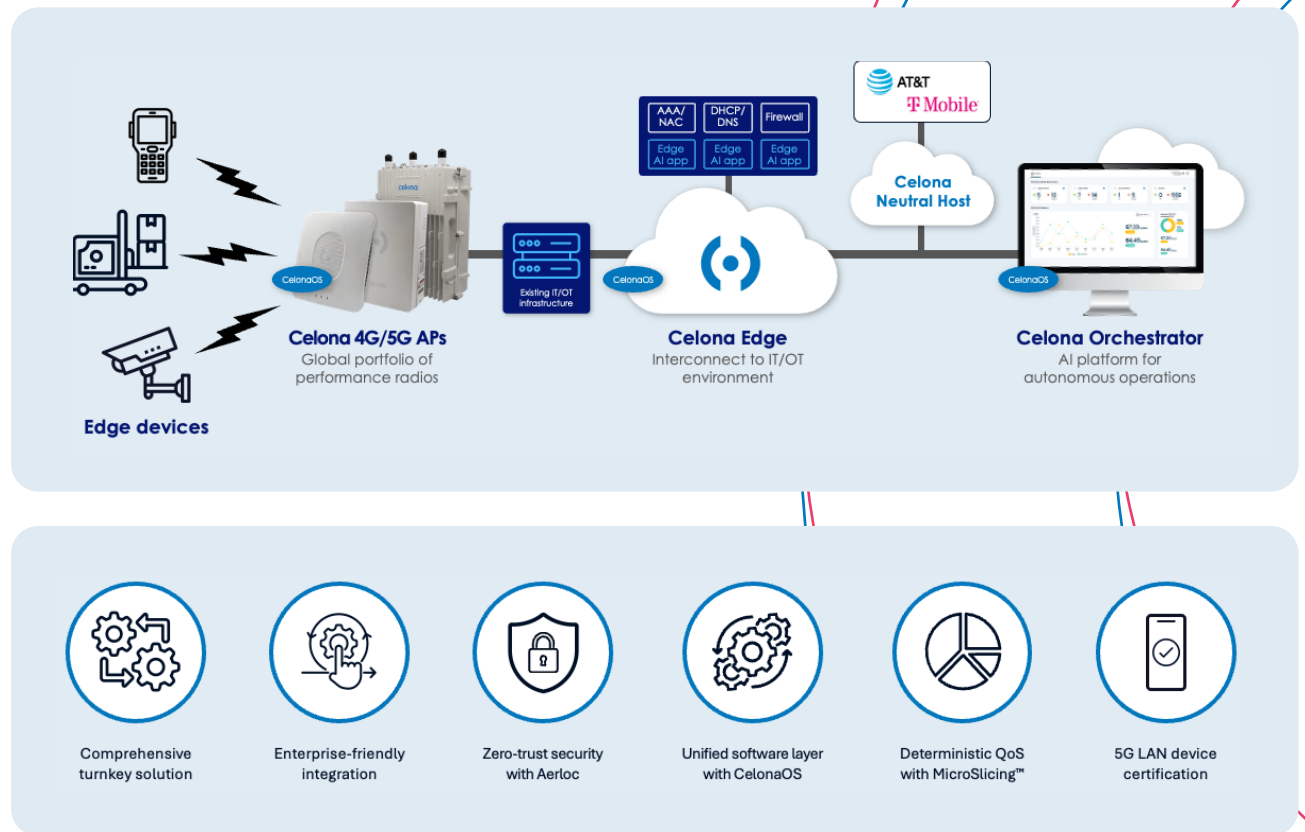
AI-powered cloud-based network management. Provides centralized visibility and control for deploying, monitoring, and optimizing private 5G across all enterprise sites.

## CelonaOS

The industry's only unified private 5G operating system — delivering a fully integrated solution across radio hardware, core networking functions, and AI-powered management.

## Celona Neutral Host

Public mobile coverage on private 5G. Extends T-Mobile, AT&T and other MNO signals on 5G LAN infrastructure, delivering full-strength coverage at remote and in-building sites.



# Specifications

## High Level Specifications

Type	5G Indoor Access Point (3GPP Rel. 15 TDD)
RF Specifications (5G)	2x2 MIMO UL/DL, up to 256 QAM Modulation
Power (Rx/Tx)	Up to 24 dBm max per port
Latency	<10ms one-way (between Device and Celona Edge)
Connected Devices	Active: 128 (concurrent)
Dimensions (WxDxH)	9.8 x 9.8 x 2.9 (inches) 250 x 250 x 74 (millimeters)
Weight	7.1 lbs.   3.22 kg
Environmental	Operating Temperature: 0° to 45°C Storage Temperature: -10° to 50° C Humidity: 5% to 95% non-condensing
IP (Ingress Protection) Rating	IP52
Surge Protection	Yes
Installation	Wall or ceiling mount T-Bar mount kits • Prelude, Suprafine, Interlude, Silhouette
Power Consumption	51 W (maximum), 802.3 bt Type 3
MTBF	>70K hours
Channel Bandwidth	AP22-48: 20, 40MHz AP22-77/78: 40, 60MHz

## Ports and Interfaces

Network Interfaces	1 RJ-45 Ethernet interface (1/2.5 GE)
Antenna	Built-in omni (max 6 dBi antenna gain)
Power Supply	PoE injector (AC to PoE power, included in the AP 22 package)
Timing	PTP grand master and IEEE 1588v2 PTP Option for external GNSS antenna
LED Indicators	System, 5G

## Compliance and Certifications

- AP22-48: FCC Cat A/B and OnGo Alliance in the United States
- AP22-78: CE
- AP22-77: CE, CE-UK

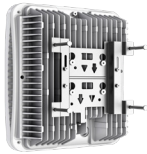
## Frequency Band Support (seperate SKUs)

AP22-48	3.55-3.7 GHz
AP22-78	3.3-3.8 GHz
AP22-77	3.8-4.2 GHz

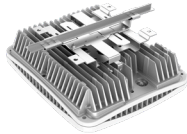
## What's in the box?



**AP 22**



**Wall and Ceiling Mount**



**T-Bar Mount**



**PoE injector**

## Ordering Information

Celona indoor AP 22 is included in the per AP Celona private mobile network subscription.

<b>C-S-5G-48-NN-X-3</b>	3-year indoor 5G private wireless service subscription for one indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes 5G category A n48 (3550-3700 MHz) access point, Celona express technical support, limited lifetime warranty and 20 private private SIM cards.
<b>C-S-5G-78-NN-X-3</b>	3-year indoor 5G private wireless service subscription for one indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes 5G indoor n78 (3300-3800 MHz) access point, Celona express technical support, limited lifetime warranty and 20 private private SIM cards.
<b>C-S-5G-77-NN-X-3</b>	3-year indoor 5G private wireless service subscription for one indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes 5G indoor n77 (3800-4200 MHz) access point, Celona express technical support, limited lifetime warranty and 20 private private SIM cards.
<b>C-S-5G-48-NN-X-5</b>	5-year indoor 5G private wireless service subscription for one indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes 5G category A n48 (3550-3700 MHz) access point, Celona express technical support, limited lifetime warranty and 20 private private SIM cards.

<b>C-S-5G-78-NN-X-5</b>	5-year indoor 5G private wireless service subscription for one indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes 5G indoor n78 (3300–3800 MHz) access point, Celona express technical support, limited lifetime warranty and 20 private private SIM cards.
<b>C-S-5G-77-NN-X-5</b>	5-year indoor 5G private wireless service subscription for one indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes 5G indoor n77 (3800–4200 MHz) access point, Celona express technical support, limited lifetime warranty and 20 private private SIM cards.
<b>CS-AERFLEX-X-3</b>	3 year add-on AerFlex service subscription for one access point private wireless service including mobile core services separated into cloud-based control plane and data plane managed by the access point. Includes Celona express technical support.
<b>CS-AERFLEX-X-5</b>	5 year add-on AerFlex service subscription for one access point private wireless service including mobile core services separated into cloud-based control plane and data plane managed by the access point. Includes Celona express technical support.
<b>CS-AERFLEX-X-M</b>	Add-on AerFlex service subscription for one access point private wireless service including mobile core services separated into cloud-based control plane and data plane managed by the access point. Includes Celona express technical support.
<b>CN-ANT-GPS-KIT</b>	Celona Industrial grade GPS/GLNSS timing antenna with a GPS bullet 360 antenna, surge protector, cables (75 ft from PTP to surge protector, 15ft from surge protector to antenna) and mounting brackets.

## Warranty

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