DATA SHEET

Celona Multimode LTE/5G Indoor Access Point AP 20

Enabling LTE or 5G NR cellular wireless connectivity for indoor environments.

AP 20 is the industry's only plug-and –play multi-mode LTE/5G access point, offering future-proof Private wireless infrastructure. It delivers pervasive indoor coverage with deterministic performance for business-critical enterprise applications. Powered by **CelonaOS**, AP20 supports **AerFlex** – controller less deployments with zero on-site infrastructure.





Celona Indoor AP 20

Celona AP 20 is a fully integrated indoor access point that can be used for LTE or 5G NR operation in enterprise environments. The presence of both LTE and 5G radios allows enterprises to future proof their infrastructure as the device ecosystem evolves from LTE to 5G.

Bringing the speed, security, and reliability of 5G NR technology to enterprises and organizations across industries, Celona's AP 20 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 20:

Multimode AP with support for LTE/5G

 Each Celona AP 20 can be configured to operate in either LTE or 5G NR AP mode. This provides enterprises a path to create a seamless upgrade to 5G NR without any hardware upgrades and deploy 4G and 5G NR devices simultaneously in the network as needed

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

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

Enterprise friendly management and operations

- Out-of-the-box zero touch provisioning to bring up each AP in minutes without any manual operation
- Self-organizing spectrum management optimizes spectrum usage across the network to minimize interference and maximize capacity
- Integrated PTP timing source eliminates the need for external timing equipment

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 4 PoE++
- Can be mounted on a T-bar, ceiling, or wall

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 40 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 Al-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

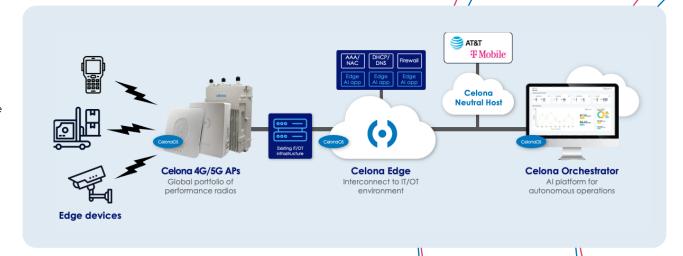
Al-powered cloud-based network management. Provides centralized visibility and control for deploying, monitoring, and optimizing private 5G across all enterprise sites.

CelongOS

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









Enterprise-friendly integration



Zero-trust security with Aerloc



Unified software layer with CelonaOS



Deterministic QoS with MicroSlicing™



5G LAN device certification

Specifications

High Level Specifications		
Туре	5G Indoor Access Point (3GPP Rel. 15 TDD) 4G LTE Indoor Access Point (3GPP Rel. 13 TDD)	
RF Specifications (5G)	5G: 2x2 MIMO UL/DL, up to 256 QAM Modulation LTE: 2x2 MIMO UL/DL, up to 64 QAM Modulation, Carrier Aggregation	
Power (Rx/Tx)	Up to 24dBm max per port	
Latency	<10ms one-way (between Device and Celona Edge)	
Connected Devices	Active: 96 (LTE); 128 (5G) concurrent	
Dimensions (WxDxH)	9.8 x 11.8 x 3.34 (inches) 250 x 300 x 85 (millimeters)	
Weight	9.8 lbs 4.45 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 (included in the AP package): Prelude, Suprafine, Interlude, Silhouette	
Power Consumption	71 W (maximum), 802.3bt Type 4	
MTBF	>70K hours	
Channel Bandwidth	20, 40MHz	

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 20 package)	
Timing	PTP grand master and IEEE 1588v2 PTP Option for external GPS antenna	

Compliance and Certifications

LED Indicators

• AP20-48: FCC Cat A/B and OnGo Alliance in the United States

System, LTE, 5G

Frequency Band Support

AP20-48 3.55-3.7 GHz

What's in the box?







Wall and Ceiling Mount



T-Bar Mount



PoE injector

Ordering Information

Celona indoor AP 20 is included in the per AP Celona private mobile network subscription.

C-S-5G-48-NNM-X-3	3 year indoor 5G private wireless service subscription for one multi-mode indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes multi-mode category A CBRS (3550-3700 MHz) access point that can be used in 4G/5G modes, Celona express technical support, limited lifetime warranty and 20 private SIM cards.
C-S-5G-48-NNM-X-5	5 year indoor 5G private wireless service subscription for one multi-mode indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes multi-mode category A CBRS (3550-3700 MHz) access point that can be used in 4G/5G modes, Celona express technical support, limited lifetime warranty and 20 private SIM cards.
C-S-4G-48-NNM-X-3	3 year indoor 4G private wireless service subscription for one multi-mode indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes multi-mode category A CBRS (3550-3700 MHz) access point that can be used in 4G mode, Celona express technical support, limited lifetime warranty and 20 private SIM cards.
C-S-4G-48-NNM-X-5	5 year indoor 4G private wireless service subscription for one multi-mode indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service. Includes multi-mode category A CBRS (3550-3700 MHz) access point that can be used in 4G mode, Celona express technical support, limited lifetime warranty and 20 private SIM cards.

C-S-5G-48-NNM-X-M	Add-on 5G software upgrade for an existing indoor 4G private wireless service subscription for one multi-mode indoor access point including management, SIM provisioning, mobile core services via Celona Edge software and Celona Orchestrator cloud service.
CS-AERFLEX-X-3	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.
CS-AERFLEX-X-5	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.
CS-AERFLEX-X-M	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.
CN-ANT-GPS-KIT	Celona Industrial grade GPS/GLNSS timing antenna with a GPS bullet 360 antenna, surge protector, cables (75 ft from PTP to surge protector, 15 ft 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.

