casa systems

5G APEX
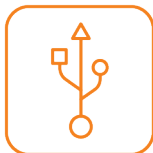## ENTERPRISE
SMALL CELL
eFEMTO 5G

Data Sheet

NEXT GENERATION WIRELESS FOR THE MASSES

Casa Systems' indoor small cell solutions help communication service providers (CSP) deploy networks faster and deliver high performance for faster connections. Casa's high-capacity 4G/5G combined enterprise small cell delivers inbuilding environment supporting up to 128 active users.

HIGH PERFORMANCE eFEMTO

Supporting up to **128 active users, this carrier-grade** solution is compliant with 3GPP protocol stack.

PLUG AND PLAY CAPABILITY

Self-configuration with zero touch, auto self-test, IPSec establishment, OAM connectivity, GPS location and more. Perfect for creating a localized private network.

SELF OPTIMIZATION

Automatic Neighbor relation function builds and maintains neighborlist for intra, inter frequency and inter-RAT neighbors.

PCI Optimization function detects PCI collision and automatically resolves PCI collision.

Mobility Robustness Optimization function detects and corrects errors in mobility configuration per 3GPP standards

RACH Optimization function self configures RACH parameters improving cell performance.

ADVANCED SECURITY FEATURES

Create closed subscriber groups, use over non-public internet connections and ensure continuity with **anti-tampering hardware**. Ideal for hospital, government or financial institution use.
Features include - IPSEC: AES, 3DES; PKI: IKEv2 key management, and certificate-based authentication (x.509) secure boot.

Key Technical Features

- Supports both LTE and 5G NR bands in one box; B3, B4, B13, B66, n48, n77 and n78
- High output power (LTE: 2x +21dBm, 5G NR: 2x +27dBm), flexible bandwidth support for both LTE and 5G NR
- Less than 50W power consumption at full capacity, DC and POE++ Type 3 input power support
- 2T2R for both LTE and 5G NR, with 256 QAM support on the DL

GENERAL
› Max TX Power: up to 27 dBm per TX port
› Antenna Configuration: 4 Internal or external antennae
› Backhaul Options : 2.5GigE/1GigE RJ-45
› Single selectable LTE & 5G NR carriers
› Highest Modulation: 256 QAM DL/64QAM UL

PHYSICAL AND ENVIRONMENTAL
› Dimensions: 255mm x 263 mm x 84mm
› 2.2-5 RF ports: 2x for LTE; 2x for 5G NR external antenna/DAS
› SMA ports: GPS Antenna Connection and 1PPS for Iridium Timing Antenna Connection
› Manual Antenna Switch: Internal / External Antenna
› Power Port: DC with Adaptor, POE type 3 (802.3bt)
› RJ-45 Ports: PoE/WAN for Power over Ethernet & Backhaul Connection and LMT port
› 6 single color LEDs on the front panel for service indication
› Operational Temperature: 0ºC to 50ºC
› IP rating: IP50
› Cooling: natural convection
› Weight 6.8 lb / 3.1 kg

FREQUENCY BANDS
› LTE Bands: B3, B4, B13, B66
› 5GNR : CBRS (n48); n78 (3.3-3.8 GHz); n77 (3.3-4 GHz)
› Additional bands and band combinations upon request

OAM
› TR-069 Auto-Configuration Server (with TR-196v2 and TR-181 Data Model Support)
› KPI Management standard KPI definition (TS 32.453), custom KPI definition support
› Fault Management
› Syslog Server
› X2 Gateway
› H(e)MS small cell management system functions (3GPP TS 32.592 and TS 32.593)

SON / PLUG AND PLAY
› Self-configuration and optimization
› Automatic Neighbor Relation (ANR)
› Physical Cell Identity (PCI) optimization
› S1/X2 autoconfiguration
› Mobility robustness optimization (MRO)
› RACH optimization
› Self Healing