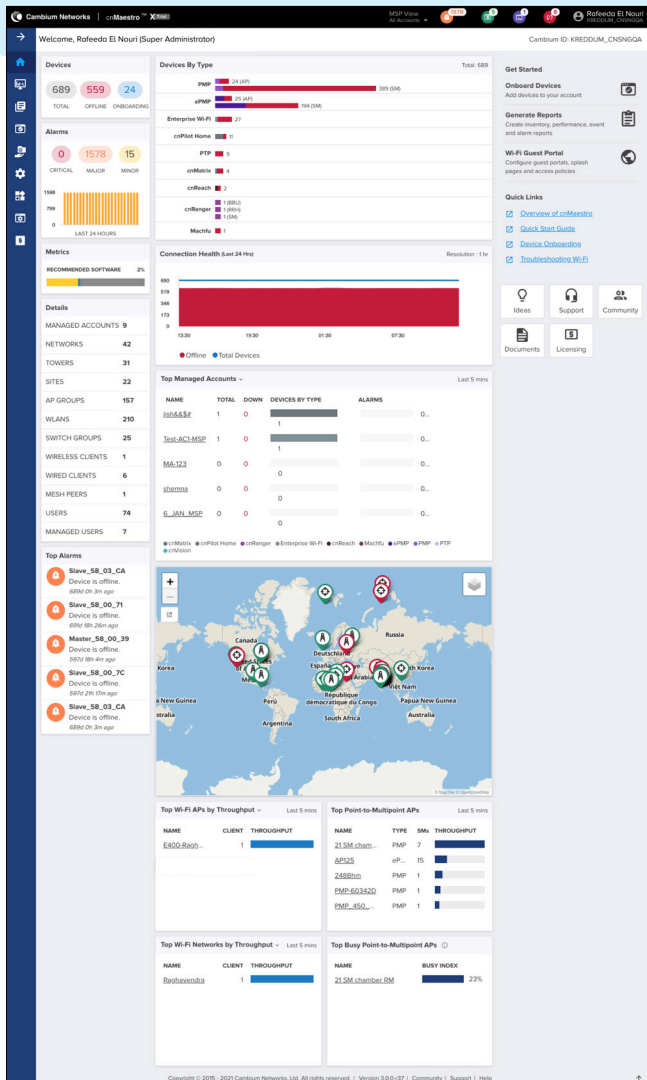# cnMaestro™ Management System

QUICK LOOK:

cnMaestro is a simple, yet sophisticated cloud-first, next-generation network management solution for Cambium Networks wireless and wired solutions. cnMaestro offers elastic scalability and single-pane-of-glass management to deliver secure, end-to-end network and wireless lifecycle management with zero-touch provisioning, monitoring and troubleshooting capabilities. It simplifies operations and ongoing maintenance.

Key Highlights

To serve growing market demand for advanced management and services functionality, Cambium Networks offers cnMaestro in two management tiers:

cnMaestro Essentials

Unlicensed, free version of cnMaestro delivers the same experience as cnMaestro in the past. This license-free option delivers a disruptive Total Cost of Ownership (TCO) for organizations of all size.

cnMaestro X

Paid subscription offer that includes advanced management capabilities, Cambium Care Pro for 24x7 technical support, accelerated access to L2 engineers and regular software updates and upgrades for advanced features.

This data sheet covers the highlights of the cnMaestro platform and cnMaestro Essentials features.

cnMaestro™ Management System

Product Overview

cnMaestro Essentials

- Comprehensive cloud and on-premises management for Cambium Networks' wired and wireless portfolio is included with the hardware.

- Zero-touch provisioning: Create, provision, monitor and manage the entire network of wireless and wired devices from a single dashboard login with key performance metrics, alarms and alerts. The cloud-first UI design is easy to learn and apply across the portfolio and helps network administrators simplify operations and deliver an optimal client experience.

- With centralized visibility and control for Cambium Networks' wireless and wired products, network administrators can quickly and easily deploy networks with minimal training. Whether you work on small sites or large distributed networks with thousands of sites, cnMaestro makes deployment and operations easy. Administrators have access to information needed to enforce policies and optimize performance. Remote support capability is integrated into the architecture, along with powerful help desk tools to debug remote issues without going onsite. Troubleshooting tools such as ping, traceroute, throughput, and live packet captures are included, dramatically reducing resolution times and enabling.

- Deployment flexibility and TCO: Choice of public cloud, private cloud, or on-premises deployment with best TCO. cnMaestro helps reduce operating cost and accelerate return on investment. cnMaestro does not require Wi-Fi controllers, thereby reducing the complexity and cost of deploying Wi-Fi networks.

- Built for scale and security at all levels: Devices connect to cnMaestro cloud using SSL-enabling deployments without changes to the firewall configuration. Cambium Intelligent edge architecture enables fault-tolerant networks where the network continues to operate even when the cloud is unreachable due to a WAN outage. With cnMaestro Essentials, you can manage networks with up to thousands of sites, and up to 10,000 devices.

- Tailored views for Enterprise, Access and Backhaul, and IIoT: The Access and Backhaul view provide visualization and control of devices from tower to edge. This includes PTP and PMP devices.

- Supports network hierarchy, which enables easy configuration, monitoring and debugging at network nodes and reducing operational costs. This especially becomes critical for large networks or small distributed networks with small on-site IT staff.
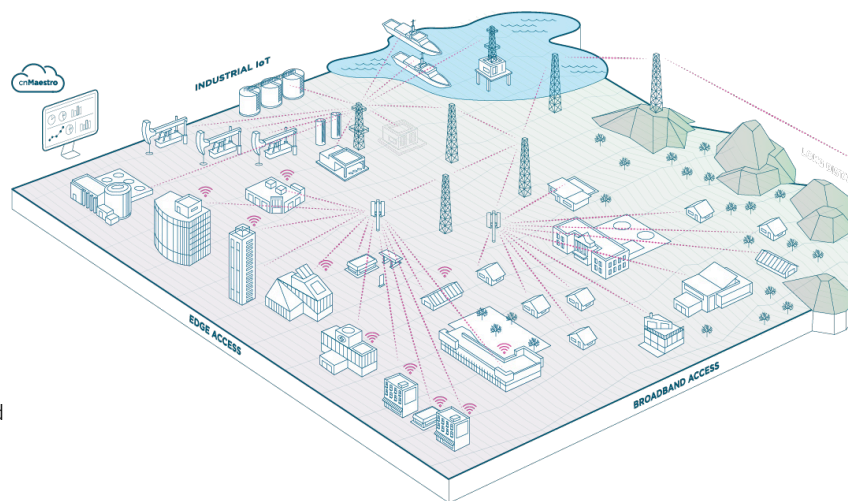
- Provides a bird's-eye view of network health with insights on performance, connectivity and client experience. Administrators can quickly identify potential trouble spots and drill down from network to client-level details.

- Extensible platform for managing third-party endpoints but requires paid subscription. Subscription details are included with part numbers at the end of this data sheet.

cnMaestro X

cnMaestro X is a super set of cnMaestro Essentials and includes advanced features with Cambium Care Pro for 24x7 technical support. *Paid subscription required.*

- MSP dashboard: MSPs can differentiate their brand to address specific sub-markets in their service area. The multi-tier customization gives the MSP tenant cloud tools to create an additional layer of guest portal customization – all managed from the cloud. MSP views consolidate the MSP tenant statistics, while allowing the MSP to drill down and support a tenant directly without impacting data from other tenants or end users on the system. Support for up to 200 managed accounts.

- Restful APIs and Webhooks for integration with existing OSS/BSS systems and event monitoring.

- Long-term historical data: 2-year data retention for FWB and 1-year data retention for Enterprise and IIoT devices.

- Support for Software-Defined Radios (SDR) on XV3-8 Wi-Fi 6 Access Points (AP).

- Mesh support for cnWave.

- Support for 1024 enterprise Wi-Fi PSKs.

- Advanced captive portal capabilities: 500 portals, 10,000 sessions, 1-month client login history.

- Monitor Wi-Fi performance from client or AP to cnMaestro X.

cnMaestro™ Management System

Product Summary *Features marked **X** require cnMaestro X subscription*

Onboarding and Provisioning
- Zero-Touch Onboarding
- Template Configuration
- Object Configuration (Enterprise)
- Claim PMP SMs Associated with AP

Network Services
- Social Login and SMS Authentication
- Access Vouchers
- Branded Guest Access Portal **X**
- PayPal Payment Gateway **X**
- Support for Software Defined Radios (SDR) on XV3-8 Wi-Fi 6 Access Point **X**
- Mesh support for cnWave **X**
- Unique PSKs supported: 300
- Unique PSKs supported: 1,024 **X**

Wi-Fi
- Simplified Wireless LAN View
- AP Group and WLAN Configuration
- Site Support for Collocated APs

Troubleshooting and Forensics
- Tower-to-Edge View
- Technical Support Dump export
- Rogue AP Detection
- Wi-Fi Packet Capture
- ePMP/PMP Link Test
- Cambium Care Pro – 24x7 technical support, accelerated access to L2 engineers and software updates/upgrades **X**

Security
- Communication over SSL
- No Inbound Internet Access
- Not-in-traffic path
- Disaster recovery

On-Premises Scaling (8vCPU & 16GB RAM)
- Total number of devices supported: 10,000 (ePMP™, cnMatrix™, Wi-Fi, PMP, PTP, cnReach™, cnRanger™)
- Number of wireless clients supported: 150,000
- Number of WLAN and AP groups supported: System capacity
- Number of templates supported for cnMatrix, cnPilot R, ePMP and PMP devices: System capacity
- Number of Guest Portals: 500 **X**
- Max number of login events: 2,000 event records for 30 days **X**

Deployment
- Cloud-Hosted delivered as a service
- Customer-Hosted VMware OVA and OpenStack
- Amazon Marketplace AMI

Visualization
- Full Visibility Across Network
- Supports ePMP™, cnMatrix™, Enterprise and Residential Wi-Fi, PMP, PTP, cnReach™, cnRanger™
- Multiple Product Views
  - o Access and Backhaul View
  - o Enterprise Wireless View
  - o Industrial Internet View
- Hierarchical Device Tree
- PMP/ePMP Sector Display

Configuration & Monitoring
- Redundant cloud services
- Scheduled system backup
- Automatic bulk software update
- Dedicated Device Dashboards
- Statistics and Trending
- Email Alerts
- Supporting concurrent device jobs **X**
- Configuration lock **X**
- Managed Service Provider Accounts **X**
- Support for up to 200 accounts
- High Availability (1+1) for On-Premises **X**
- Monitor Wi-Fi performance from client or AP to cnMaestro (On-Premises NMS; Cloud NMS – N/A) **X**

Data and Reporting
- Statistics Reports Exported in CSV
- Export UI Tables in CSV or PDF
- RESTful Monitoring/Provisioning API **X**
- Long-term data retention **X**
  - o 2-year for FWB
  - o 1-year for Enterprise and IIoT

Administration
- Role-Based Access
- Auto provisioning
- RADIUS, TACACS+, LDAP, and AD Login
- Advanced troubleshooting **X**
  - o Audit logs
  - o Audit syslog & Event syslog (On-Premises NMS; Cloud NMS – N/A)
- Advanced monitoring **X**
  - o Session management
  - o User authentication, SNMP support (On-Premises NMS; Cloud NMS – N/A)

GET STARTED at
cloud.cambiumnetworks.com

ABOUT CAMBIUM NETWORKS

Cambium Networks empowers millions of people with wireless connectivity worldwide. Its wireless portfolio is used by commercial and government network operators as well as broadband service providers to connect people, places and things. With a single network architecture spanning fixed wireless and Wi-Fi, Cambium Networks enables operators to achieve maximum performance with minimal spectrum. End-to-end cloud management transforms networks into dynamic environments that evolve to meet changing needs with minimal physical human intervention. Cambium Networks empowers a growing ecosystem of partners who design and deliver gigabit wireless solutions that just work.

cambiumnetworks.com

01252021