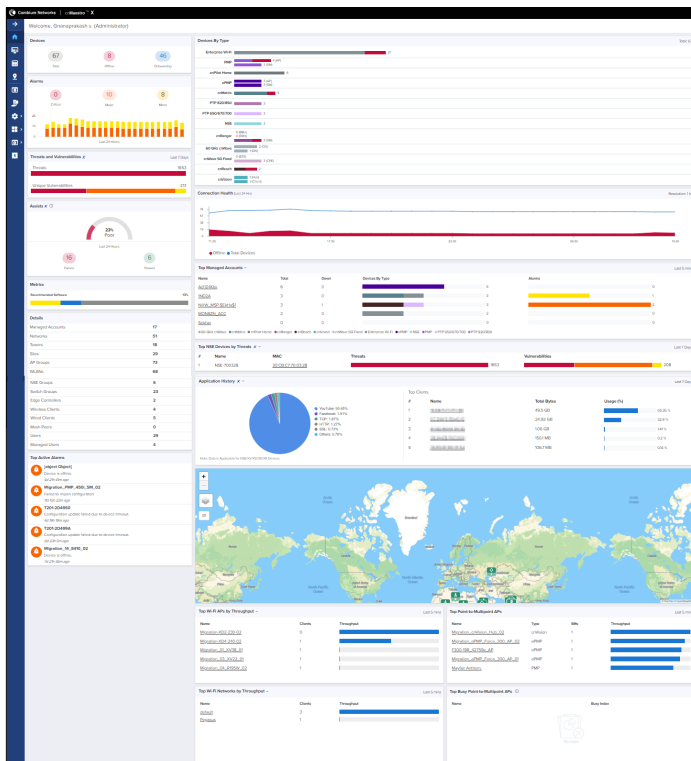
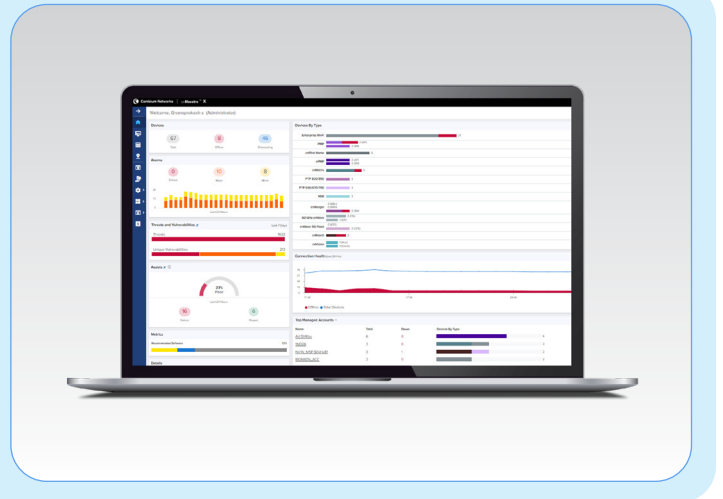


cnMaestro™ Management System

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 previous versions of cnMaestro. This license-free option delivers a disruptive Total Cost of Ownership (TCO) for organizations of all sizes.

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.

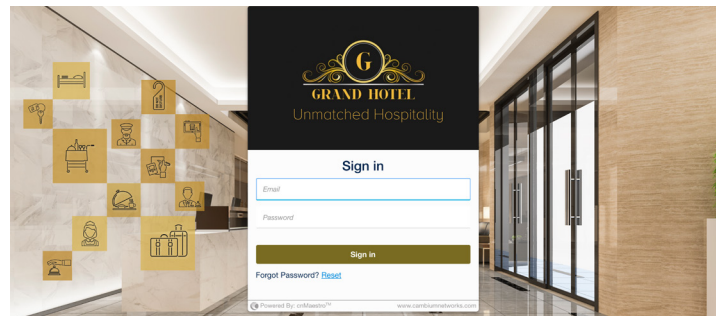
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Product Overview

cnMaestro Essentials

- Comprehensive cloud and on-premises management for Cambium's wired and wireless portfolio is included with the hardware purchase with no subscription or recurring fees.
- 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.



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).
- Support for 1024 enterprise Wi-Fi PSKs.
- Advanced captive portal capabilities: 500 portals, 30,000 max vouchers, 1 year 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
- cnArcher installation summary upload (PMP and ePMP) X
- Mass provisioning for ePMP /PMP/cnWave 60 GHz (Using LinkPlanner) X
- Webhooks support X

Network Services

- Social Login and SMS Authentication
- Access Vouchers
- Branded Tenant Login Page X
- Payment Gateway X
 - » Paypal
 - » IPPay
 - » QuickPay
 - » Orange Money
 - » mPesa
- Support for Software Defined Radios (SDR) on XV3-8, XE3-4 and XE5-8 Wi-Fi 6 Access Points
- Unlimited Radius based ePSK X
- Unique PSKs supported: 300 per WLAN and per account
- Unique PSKs supported: 2,000 Per WLAN and 50,000 Per Account X
- Radius-based ePSK X
- Number of Guest Portals: 4
- Number of Guest Portals: 500 X
- Max number of login events: 2,000 event records for 7 days
- Max number of login events: 2,000 event records for 1 year X
- Max number of managed devices cnMaestro: 10,000 - Requires Cambium Care Pro for more than 10,000 devices (Enterprise + FWBB)
- Max number of managed devices: 25,000 X
- Application visibility - Visibility of over 2400 different applications across the Wi-Fi access network X

Wi-Fi

- Simplified Wireless LAN View
- AP Group and WLAN Configuration
- cnMaestro X supports a maximum of 10,000 guest client sessions sessions at a time. X
- 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 – 24/7 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

Deployment

- Cloud-Hosted delivered as a service
- Customer-Hosted VMware OVA
- 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

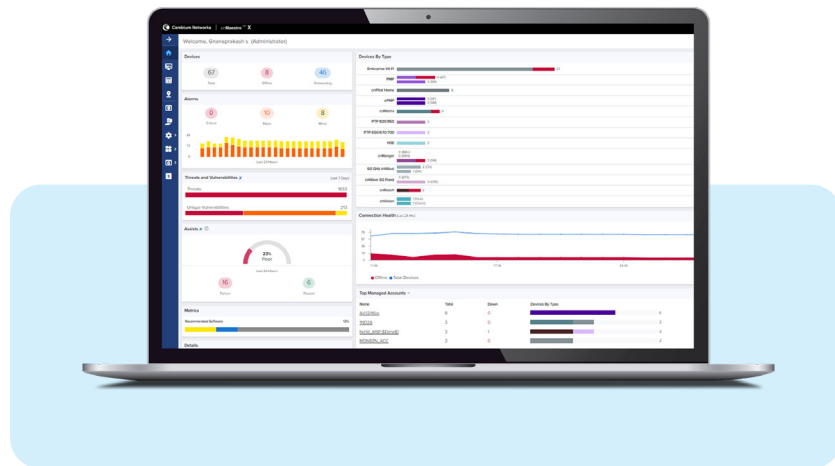
Data and Reporting

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

Administration

- Management users: 10
- Management users: 200 X
- Role-Based Access
- Auto provisioning X
- RADIUS, TACACS+, LDAP, and AD Login X
- 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 (On-Premises NMS; Cloud NMS – N/A)
 - o Open ID/SAML Authentication X
- cnWave 60GHz MAP features X
 - o Extensive Network Map RF Link visualization
 - o Auto Manage Route

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GET STARTED at
cloud.cambiumnetworks.com

Free 90-day trial of cnMaestro X:
cambiumnetworks.com/cnmaestro-x

ABOUT CAMBIUM NETWORKS

Cambium Networks delivers wireless communications that work for businesses, communities and cities worldwide. Millions of our radios are deployed to connect people, places and things with a unified wireless fabric that spans multiple standards and frequencies of fixed wireless and Wi-Fi, all managed centrally via the cloud. Our multi-gigabit wireless fabric offers a compelling value proposition over traditional fiber and alternative wireless solutions. We work with our Cambium certified ConnectedPartners to deliver purpose-built networks for service provider, enterprise, industrial, and government connectivity solutions in urban, suburban, and rural environments, with wireless that just works.

cambiumnetworks.com

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