

# 60 GHz cnWave V3000

## High-Gain Client Node

### QUICK LOOK:

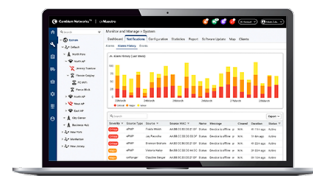
- Supports 57 to 66 GHz
- Up to 7.6 Gbps (3.8 Gbps UL and 3.8 Gbps DL) with channel bonding
- Easy installation with auto-beamforming
- Low latency < 1 ms
- 802.11ay technology with Terragraph certification



### DESIGNED FOR LONG-RANGE, HIGH-CAPACITY AND HIGH-DENSITY DEPLOYMENTS

Cambium Networks' 60 GHz cnWave solution provides easy, fast and cost-effective wireless gigabit connectivity for edge access and/or high-capacity backhaul for edge access solutions at a significantly lower TCO than fiber infrastructure. Service providers and enterprises now have access to gigabit for business and residential connectivity, backhaul for Wi-Fi access or LTE/5G small cell. Certified for Facebook Terragraph, cnWave mesh solutions are highly efficient at handling high-density deployments in cities and suburban areas.

V3000 is featured with a 44.5 dBi high-gain antenna with beamforming. The client nodes can support up to 7.6 Gbps with channel bonding for both PMP and PTP configurations.



### CLOUD AND ON-PREMISES MANAGEMENT

60 GHz cnWave operates with Cambium Networks' cnMaestro management system. cnMaestro™ is a cloud-based or on-premises software platform for secure, end-to-end network control. cnMaestro wireless network manager simplifies device management by offering full network visibility and zero-touch provisioning. View and perform a full suite of wireless network management functions in real time. Optimize system availability, maximize throughput and meet emerging needs of business and residential customers.

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### Specifications

#### Spectrum

<b>Frequency Range</b>	57 to 66 GHz in a single SKU
<b>Channel Width</b>	2.16 GHz, 4.32 GHz*
<b>Carrier Bonding*</b>	Up to 2 adjacent channels
<b>Mode of Operation</b>	PMP or Mesh, PTP

#### Interface

<b>Channel Access</b>	TDMA/TDD
<b>Ethernet Interface</b>	1 x 100/1000/10G BaseT with PoE In, 1 x 100/1000 BaseT with 802.3at PoE Out, 1 x SFP+

#### Ethernet

<b>Protocol Supported</b>	IPv4, IPv6
<b>Network Management</b>	cnMaestro, HTTP, HTTPS, SNMP v2c & v3
<b>MTU</b>	4,000 bytes
<b>VLAN*</b>	802.1ad (QinQ), 802.1Q with 802.1p priority
<b>QoS*</b>	4 Level QoS, DSCP and VLAN Tag

#### Security

<b>Encryption</b>	128-bit AES (optional)
<b>Firmware Security</b>	Signed Firmware Images

#### Performance

<b>Modulation &amp; Coding Schemes</b>	MCS-0 (BPSK) to MCS-12 (16-QAM)
<b>Latency</b>	< 1 ms
<b>Maximum EIRP</b>	60.5 dBm

#### Antenna

<b>Gain</b>	44.5 dBi
<b>Type</b>	Integrated
<b>Beamforming Scan Range</b>	+/- 2° azimuth, +/- 1° elevation
<b>Beam Width</b>	0.8°

#### Powering

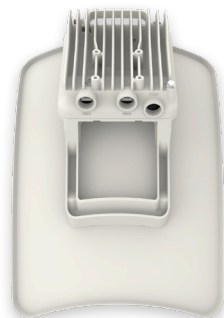
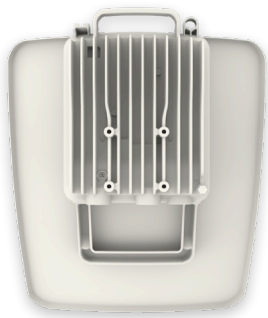
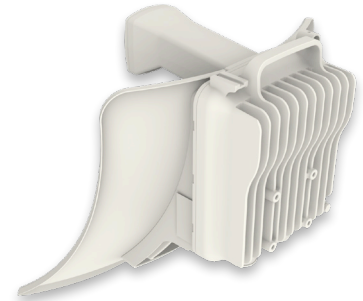
<b>Type</b>	Passive PoE (42-57V) without AUX PoE Out in use
<b>Power Consumption</b>	55 W with AUX PoE Out in use, 30 W without AUX PoE Out in use

#### Physical

<b>Environmental</b>	IP66/67
<b>Temperature</b>	-40°C to 60°C (-40°F to 140°F)
<b>Mean Time Between Failure</b>	> 40 years
<b>Weight</b>	< 4 kg (8.8 lbs)
<b>Dimensions</b> W x H x D	346 mm x 414 mm x 344 mm (13.6 in x 16.3 in x 13.5 in)
<b>Wind Survival</b>	200 km/h (124 mi/h)

\* Available in future release

## 60 GHz cnWave V3000 Client Node



### Ordering Information

<b>C600500C024A</b>	60 GHz cnWave V3000 Client Node Radio Only
<b>C600500D001A</b>	60 GHz cnWave V3000 Client Node Antenna Assembly
<b>N000045L002A</b>	Tilt Bracket Assembly
<b>C000000L125A</b>	cnWave Precision Mounting Bracket

**NOTE:** Power Supply Unit must be ordered separately.

### 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.