

# 60 GHz cnWave V3000

## High-Gain Client Node

### QUICK LOOK:

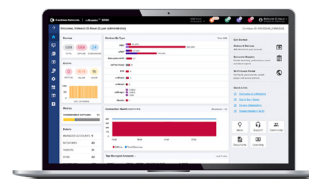
- Supports 57 to 66 GHz
- Up to 3.6 Gbps (1.8 Gbps DL and 1.8 Gbps UL). Channel bonding typically doubles capacity
- Easy installation with auto-beamforming
- Low latency < 1 ms
- 802.11ay technology with Terragraph certification



### 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 solutions are highly efficient at handling high-density deployments in cities and suburban areas.

V3000 is featured with a 44.5 dBi or 40.5 dBi high-gain antenna with beamforming. The Client Node (CN) can be used as either a client in PMP configurations or an end-point in 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.

## 60 GHz cnWave V3000 Client Node

### 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 Client or 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+ 1G and 10G

#### Networking

<b>Protocols Supported</b>	IPv4, IPv6, Layer2 Bridge, Layer3 IPv6 Routing, Open/R mesh
<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
<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 (with 44.5 dBi Antenna) 54.5 dBm (with 40.5 dBi Antenna)

#### Antenna

<b>Gain</b>	44.5 dBi or 40.5 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>	60 W with AUX PoE Out in use, 30 W without AUX PoE Out in use

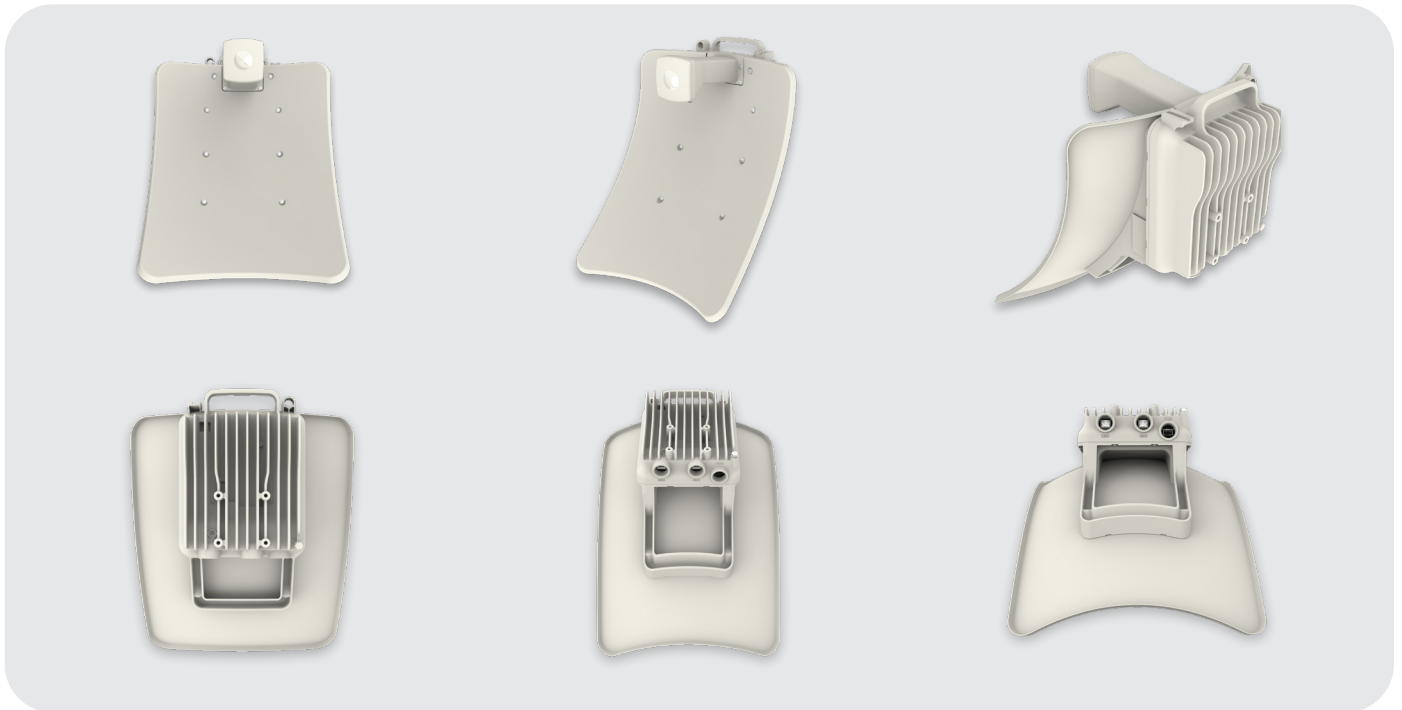
#### Physical

<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>	<b>V3000 with 44.5 dBi dish</b> 4.7kg (10.3 lbs.) without clamp <b>V3000 with 40.5 dBi dish</b> 3.9kg (8.6 lbs.) without clamp
<b>Dimensions</b> H x W x D	<b>V3000 with 44.5dBi dish</b> 421 x 347 x 349 mm (16.57 x 13.66 x 13.7 in) <b>V3000 with 40.5dBi dish</b> 343 x 198 x 251 mm (13.5 x 7.8 x 9.9 in)
<b>Wind Survival</b>	200 km/h (124 mi/h)

\* Available in future release

### 60 GHz cnWave V3000 Client Node

#### V3000 with 44.5 dBi Antenna



#### V3000 with 40.5 dBi Antenna



## 60 GHz cnWave V3000 Client Node

### Ordering Information

<b>C600500C024A</b>	60 GHz cnWave V3000 Client Node Radio Only
<b>C600500C025A</b>	60 GHz cnWave V3000 Client Node Radio Only - Israel Only
<b>C600500D002A</b>	60 GHz cnWave V3000 Client Node Antenna Assembly, 40.5 dBi, 4 Pack
<b>C600500D003A</b>	60 GHz cnWave V3000 Client Node Antenna Assembly, 44.5 dBi, 4 Pack
<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.