

# cnWave 60GHz Distribution Node



## KEY FEATURES:

- Pre-802.11ay technology, support TDMA channel access and TDD Network Synchronization
- Support 57 to 66 GHz with channel bandwidth of 2.16 GHz in a single SKU
- Dual Sectors with total 280° coverage
- Up to 20 Gbps (L1) total capacity per Distribution Node (DN), 10 Gbps per sector
- Dramatically reduces the effect of interference and easy installation in both Uplink and Downlink with smart beamforming
- Terragraph Certified, embedded Terragraph (Facebook) Mesh Support
- Hardware ready for Channel bonding, double the capacity with software license key
- Managed by cnMaestro, simplifies device management by offering full network visibility, zero-touch provisioning and a dedicated dashboard for each DN node.
- Build-in GPS Receiver
- 1 x 10GbE with PoE IN, 1 x GE with PoE OUT and 1 x SFP+ cage, ensure optimal performance with lowest latency



CLIENT NODE (CN) MODEL	V1000	V3000
Maximum Downlink Throughput (L2)	1 Gbps	7.6 Gbps
Maximum EIRP	39 dBm	61 dBm

## SPECIFICATIONS

SPECTRUM	
Frequency Range	57 to 66 GHz in a single SKU
Channel Width	2.16 GHz
Carrier bonding	Up to 2 adjacent channel same channel size carriers
Mode of Operation	PMP or Mesh, PTP
Subscription Ratio per DN	Up to 30 devices total with two sectors - Up to 15 CN, per sector - Up to 14 CN + 1 DN, per sector - UP to 13 CN + 2 DN, per sector

## SPECIFICATIONS

### INTERFACE

Channel Access	TDMA
Ethernet Interface	1x 100/1000/10000 BaseT with PoE In, 1 x 100/1000/1000 BaseT with 802.3at PoE Out, 1x SFP+

### MANAGEMENT

Protocol supported	IPv4, IPv6, UDP, TCP/IP
Network Management	cnMaestro, Terragraph NMS, HTTP, HTTPS, SNMPv3
MTU	4000 bytes
VLAN	802.1ad (QinQ), 802.1Q with 802.1p priority
Layer 3 Protocol	Open/R and BGP Peering
QoS	4 Level QoS, DSCP and VLAN Tag

### SECURITY

Encryption	128-bit AES (optional)
Firmware Security	SecureBOOT and Signed Firmware Images

### PERFORMANCE

Modulation & Coding Schemes	MCS0 (BPSK) to MCS12 (16QAM)
Latency	< 3 ms
Maximum EIRP	39 dBm

### ANTENNA

Gain	20 dBi
Type	Integrated
Sector beam width	+/- 140° azimuth, +/- 25° elevation

### POWERING

Type	Passive PoE (42-57V) or 802.3at without AUX PoE Out in use
Power Consumption	60 W with AUX PoE Out in use, 35W without AUX PoE Out in use

### PHYSICAL

Environmental	IP66/67
Temperature	-40 to +60°C (-40 to 140°F)
Mean Time Between Failure	> 40 years
Weight	< 4 kg (8.8 lbs.)
Dimensions (W x H x D)	280 x 185 x 102 mm (11 x 7.3 x 4 Inches)
Wind Survival	200 km/h (124 mi/h)