

28 GHz cnWave™ Customer Premise Equipment

QUICK LOOK:

Cambium Networks unveils a simple, affordable yet powerful 5G NR solution for 24–29 GHz spectrum.

- Throughput of over 400 Mbps aggregate
- 5G NR protocol using SDR
 Architecture to enable continuous
 evolvement and enhancements





KEY FEATURES

- Up to 400 Mbps of throughput at the CPE*
- Gigabit Ethernet Interface provides the maximum transfer rates to the device
- 802.3at PoE to allow standards-based powering of devices
- One radio model capable of operation from 24.25 GHz to 29.50 GHz spectrum, covering the most common 5G bands globally
- Optimized for throughput, high-gain integrated dish to maximize range

*Future software release

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Specifications

Product Model Numbers

CPE Radio C280500C001A

Antenna Assembly C280500D001A

Spectrum

Frequency Range 24.25 – 29.50 GHz

Channel Width 50*, 56, 100*, 112 MHz channels

Interface			
MAC (Media Access Control) Layer	5G NR Air Interface		
Physical Layer	OFDM		
Ethernet Interface	100/1000BaseT, full duplex, rate auto negotiated (802.3 compliant)		
Protocols Used	IPv4, UDP, TCP, IP, ICMP, SNMP		
Network Management	IPv4/IPv6 (dual stack), HTTP, HTTPS, Telnet, FTP, SNMPv2c and v3, Cambium Networks cnMaestro™		
VLAN	802.1ad (DVLAN Q-inQ), 802.1Q with 802.1p priority, dynamic port VID		
Security			
	FIDS 107 128 bit AES		

Security		
Encryption	FIPS-197 128-bit AES,	
	256-bit AES (Requires Optional License for attached Access Point)	

Performance				
Channel Size	DL MCS	DL Sensitivity (dB)	UL MCS	UL Sensitivity (dB)
112 MHz	MCS 23	-91.5	MCS 23	-78.5
	MCS 6	-111.1	MCS 6	-98.2
56 MHz	MCS 24	-93.3	MCS 22	-82.7
	MCS 6	-114.1	MCS 6	-101.2
Maximum EIRP	+48 dBm			
Hybrid ARQ	Yes, DL and UL			
Maximum Deployment Range	Up to 5 km (3.2 miles)			
Latency	1–2 ms, typical			
Quality of Service	Four levels*			

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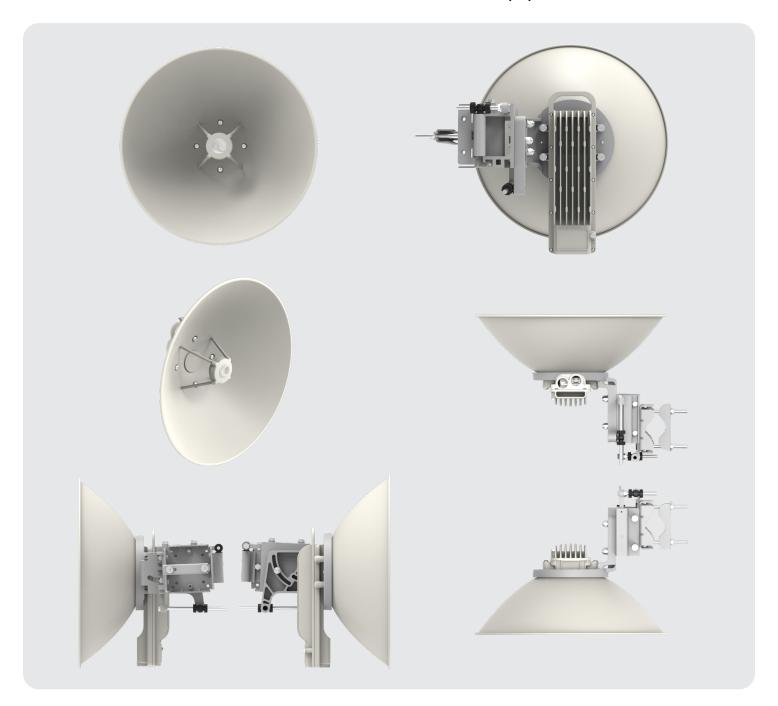
Antenna	
Antenna Connection	Integrated Reflector Dish
Integrated Antenna Peak Gain	36 dBi
Beam width - Azimuth	2°
Beam width - Elevation	2°

Physical			
Mean Time Between Failure	> 40 years		
Environmental	IP67, IP66		
Temperature / Humidity	-40°C to 60°C (-40°F to 140°F), 100% non-condensing		
Weight	Dish + Radio: 3.8 kg (8.4 lbs); with Precision bracket: 6.5 kg (14.3 lbs)		
Wind Loading - Front Facing	@ 145 km/h (90 mph): < 207 N		
	@ 200 km/h (124 mph): < 395 N		
Dimensions	Radio only: 34 x 14 x 8 cm (13.9 x 5.5 x 3.1 in.)		
	Assembled unit: 46 cm (18.1") diameter, 24 cm (9.4") depth		
Power Consumption	20W maximum		
Input Voltage	40–60 VDC		
Mounting Brackets	C00000159A - 28 GHz cnWave Precision Bracket Kit C00000160A - 28 GHz cnWave Fine Adjust Bracket Kit		

Certifications	
ISED Canada	RSS-191, SRSP 342.25 & SRSP 325.25
FCC	CFR47 Part 101 & CFR47 Part 30
CE	EN 302 326-2, v2.1.0



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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.

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