

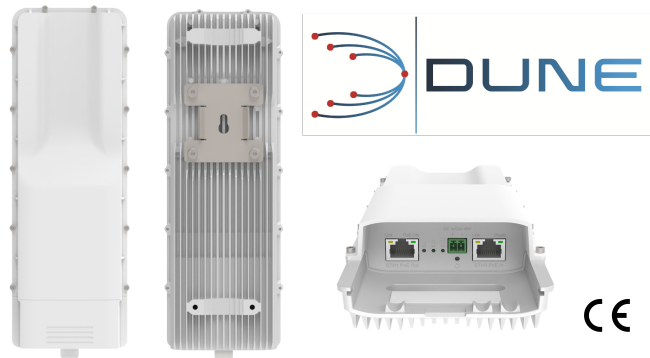
DN170G

60 GHz AP & CPE | 2.5Gbps | 48 Clients

DUNE: Wireless Fiber in the unlicensed 60GHz Band

Multigigabit connectivity for enterprise, Multi-dwelling units and private Networks.

Small size and easy deployment with very competitive price for quick return on investment.



Overview

The Dense Urban Network Environment (DUNE) mmWave system provides Fixed Wireless Access (FWA) for areas where other solutions will not work due to congestion, poor infrastructure or cost. DUNE is not impacted by Wi-Fi or 4G / 5G interference, and provides a highly reliable capacity of up to 3 Gbps at ranges over 1km making it a perfect solution for Wireless Internet Service Providers (WISPs).

DUNE supports point-to-multipoint (PTMP) networks with up to 48 clients per sector. Peraso's unique network access protocol ensures fair traffic balancing for all users. DUNE offers 6 channels of 2.16GHz bandwidth each, as well as a half-channel (1.08GHz) option to increase number of channels and link margin by 3dB. An outdoor router could be added to provide a Wi-Fi hotspot.

DUNE terminals are very energy efficient and can be powered by solar or battery backup for continuous service in areas with unreliable power. Models have beamforming allowing selection of gain and field-of-view matching installation requirements.

DUNE 60GHz Features

- 51 to 71 GHz band. 6 channels or 13 channels
- Low oxygen absorption for channels 5 & 6
- PTMP with field of view of 120°. 48 Clients
- Automatic transmit power and rate adaptation
- Dynamic beamforming facilitates installation

DUNE System Features

- WPA security (128 bit data encryption)
- RADIUS anti-theft. Remote authentication
- SNMP v2/3 and RESTful API management
- Polycarbonate and aluminum enclosure
- Operating temperature: -40°C to 60°C

Feature	Specification
Application	Access Point (AP), typically or Consumer Premise Equipment (CPE)
Frequency Band	57-71 GHz
Channel Bandwidth	2.16GHz or 1.08GHz
Operating channels	1-6 (Full BW), 1-13 (Half BW)
EIRP	40dBm max (regulatory limit)
Antenna Gain and Polarization	20dBi (max), Vertical
3D beamforming (-3dB)	120° (+/- 60°) Azimuth, 50° (+/- 25°) Elevation, 64 codebook vectors
Beamwidth	23° Azimuth x 12° Elevation (Typical)
Maximum throughput	2.5Gbps total bi-directional traffic
Point-to-multipoint operation	Up to 48 connections. Dynamic scheduling
Latency (one way)	Point-to-multipoint, bi-directional traffic (typical values) 4 STA: 1ms 16 STA: 4ms
Data Ports	2.5Gbit Ethernet RJ-45, 1Gbit Ethernet RJ-45
Power Input Interfaces	38-52 VDC 2.5Gbit RJ-45, passive PoE. 2 or 4 pair power DC input screw terminal
Output power	1G port: passive PoE out, 0.5A Max
Power consumption	17W without PoE output. 41W with PoE output
Environmental	-40°C - 60°C operation. 5-95% noncondensing humidity.
Dimensions and Weight	11"/28cm (H), 4"/10.2cm (W), 2"/5.1cm (D). 695g
Management	Web interface, SNMP v2 & v3, SNMP traps and RESTful API
Security modes	WPA-PSK, WPA-Enterprise Security (WPA/WPA2/WPA3)
Max MTU	7900b
DHCP snooping	STA mode: DHCP Option 82 injection, rogue DHCP server blocking
VLAN	VLAN paathrough, Management VLAN, STA Data VLAN
Services	Ping watchdog, remote syslog, local log, device discovery, speediest, ping, trace route, NTP
Anti-Theft	RADIUS. Remote Authentication Dial-In User Service
LEDs	Ethernet link, wireless, signal level and power