

Overview

The Dense Urban Network Environment (DUNE) mmWave system delivers Fixed Wireless Access in areas where other wireless solutions fail due to congestion, poor infrastructure, or high costs. Operating in the license-free, interference-free 60 GHz band, DUNE provides gigabit service that competes directly with fiber at a lower cost of installation and ownership.

DUNE supports high-density point-to-multipoint networks with up to 48 clients per sector. Peraso's unique network access protocol ensures fair traffic balancing for all users.

Peraso's joins the DUNE product lineup to address intermediate range Point-to-Point or Point-to-Multipoint links. Acting as a CPE, Peraso's DC170P065 can maintain links up to 2 km with a DN170G Distribution Node, while a pair of DC170P065 units can deliver gigabit point-to-point connectivity over distances up to 3 km.

DUNE is unaffected by Wi-Fi or 4G/5G interference and provides reliable network capacity of up to 3.5 Gbps per sector. Energy-efficient DUNE terminals can be powered by solar or battery backup, ensuring continuous service even in areas with unreliable power.



DC170P065

60 GHz Features

- Unlicensed 57 to 71 GHz band
- 2 Gbps peak bi-directional throughput
- Point-to-Multipoint range up to 2km
- Point-to-Point range up to 3km
- 6 channels at 2.16 GHz or 13 channels at 1.08 GHz

- Automatic rate adaptation
- WPA3 access security
- 128-bit AES encryption
- 54dBm EIRP
- Automatic Transmit Power Control

System Features

- 1Gbit Ethernet port
- POE input 48V Nominal
- Ultra-compact 13 x 12 x 10 cm
- Solar and battery backup capable
- Polycarbonate and aluminum enclosure

- Management FeaturesHTML Web Interface
 - SNMP V2/3 and RESTful API management

- 5 to 95% noncondensing humidity
- IP66 water resistance
- · FCC, CE certifications
- Pole or wall mount fixture options
- -30°C to 55°C operation
- DHCP snooping
- Status indicator LEDs

Key Specifications

DUNE Common Terminal Features	
Parameter	Value
Frequency band	57 – 71 GHz (may vary according to regional regulations)
Channel BW	2.16 or 1.08 GHz
Operating channels	1-6 (full BW), 1-13 (half BW)
Point-to-Multipoint sector capacity	Up to 3 Gbps. Up to 48 clients.
Station scheduling	Dynamic scheduling multiple access (proprietary demand balancing)
Transmission duplex mode	TDD
Model DC170P065	
Application	CPE Station Point-to-Multipoint, Point-to-Point terminal
EIRP	54dBm (FCC and CE compliant)
Antenna gain and polarization	30dBi, Vertical
Beam-steering range	8° azimuth x 8° elevation
Maximum throughput	2.0 Gbit/s total bi-directional traffic
Data port	1 Gbit Ethernet RJ-45
Installation port	USB-C
Status LEDs	Ethernet link, wireless link, signal level, power
Power Input Interfaces	Active POE. 38-57 VDC
Power consumption	15W
Dimensions	Height: 13 cm, Width: 12 cm, Depth: 10 cm
Weight	425 g
Operating temperature	-30°C – 55°C
Accessories	Pole mount and passive DC power injector included
Management and Software	
Management	Web interface, SNMP v2 & v3, SNMP traps, & Restful API
Data and access security	WPA-PSK, WPA-Enterprise (WPA/WPA2/WPA3), AES 128 GCMP
IP modes	IPV4, IPV6
Max MTU	7900 bytes
Networking mode	Transparent Bridge
DHCP snooping	STA mode: DHCP Option 82 injection, rogue DHCP server blocking
VLAN	VLAN passthrough, Management VLAN, STA Data VLAN
Services	Ping watchdog, remote syslog, local log, device discovery, speed test, ping, traceroute, NTP

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