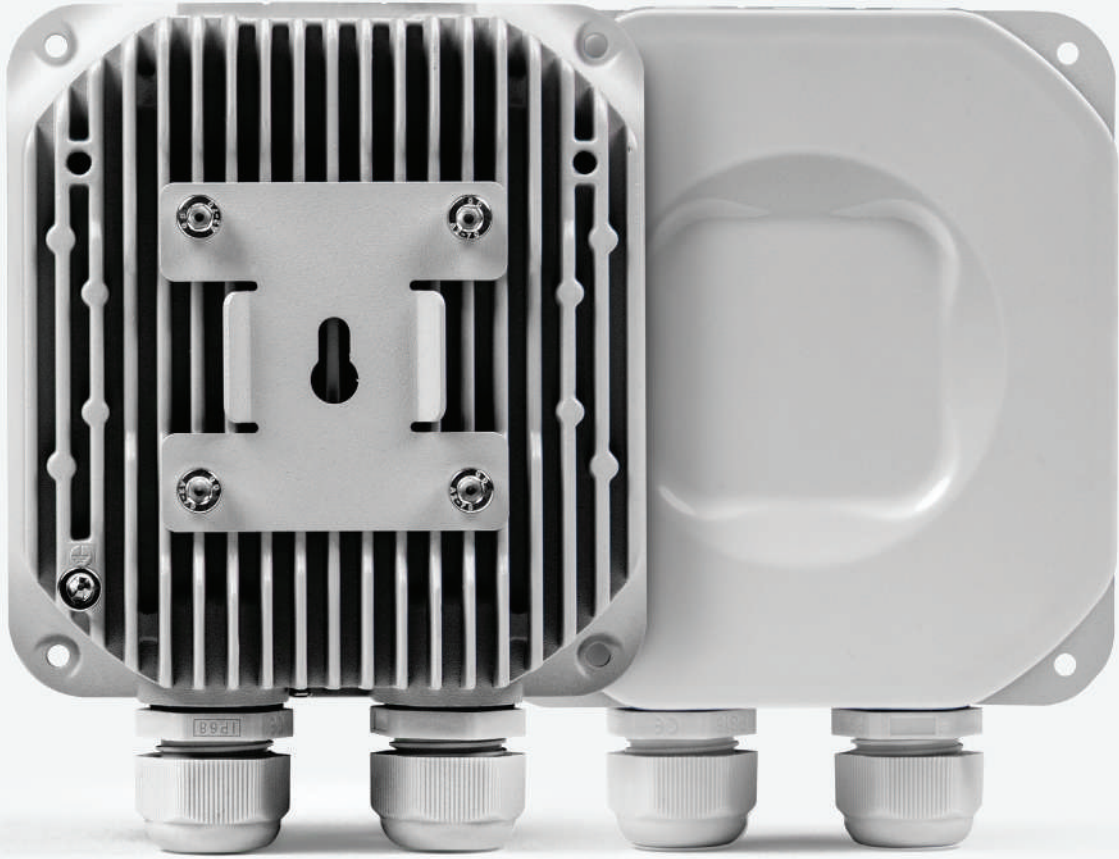


FreeMile 60

Datasheet



Freemile 60 is a solution designed to efficiently utilize 60 GHz spectrum, crucial for reducing interference and maximizing coverage. Freemile 60 stand out for ability to deliver fiber-like, multi-Gigabit speeds to a significant number of users per area, all at a fraction of the cost associated with fiber deployments.

Additionally, Freemile 60 is ideally suited for creating high-speed point-to-point connections in urban environments, making them versatile for various networking needs. A key feature is proprietary TDMA scheduling protocol, which is especially beneficial for networks that require high-capacity upload bandwidth. This combination of benefits makes Freemile 60 a comprehensive solution for enhancing wireless network performance and efficiency.

Technical Specification

System Parameters

Hardware

Architecture Modular design: Outdoor unit + optional antenna kit

Radio

Operating modes Access Point; Station

Max STA count per AP Up to 32 stations

Max EIRP Outdoor unit: 38dBm; 100mm antenna kit 55dBm; 300mm antenna kit 64dBm

Frequency Range (GHz) 57 – 71 (Channels: 1 - 6)

Channel Size Full: 2.16 GHz; Half: 1.08 GHz

Outdoor Unit: Beamforming 90° x 50° (azimuth x elevation); Antenna gain: 16dBi

100mm Antenna Kit: Beamforming 6° x 6° (azimuth x elevation); Gain: 33dBi

300mm Antenna Kit: Beamforming 2° x 2°; Gain: 42 dBi

Range PTP: up to 6 km (300mm antenna kit)
PTMP: up to 1.6 km (Station with 100mm antenna kit)

Modulation: MCS1-MCS12

Encryption AES 256 + GCMP

Station scheduling TDMA: dynamic scheduling mechanism

Duplexing TDD

Ethernet Data Parameters

Number of Ports 1x 10/1000/2500Eth (RJ-45) (PoE-In)
1x 10/100/1000Eth (RJ-45) (PoE-Out)

VLAN Data & Management VLAN

Max MTU size 7900b

Management HTTP/HTTPS, SSH, SNMP v1(traps only)/v2/v3; RESTful API

In-band management Via LAN

GUI Web Based

Ethernet data throughput Up to 2.3 Gbps (half duplex)

Mechanical

Dimensions 130 x 120 x 55 mm

Ports 2x RJ-45

Temperature -30 °C to +55 °C / -22 °F to +131 °F

Weight 425 g

Power

Power consumption 8-17W, and 41W with PoE out in use

Power input Active PoE 38-57VDC (passive injector included)

PoE-Output power Passive PoE out w/max 0.5A

Lightning protection IEC 61000-4-5