Adtran

Data Sheet

Metnet 60G

mmWave (60GHz) CPE

Gigabit | Mesh | PoE Capable | Low TCO

Benefits

- **Enterprise Fixed Wireless Access**
- **Residential Fixed Wireless Access**
- **Gigabit-Capable Campus LAN Extension**

Overview

The Adtran Metnet 60G mesh mmWave backhaul and access mesh technology enables operators and service providers to rapidly deliver Gigabit services to residential and enterprise customers at a fraction of the cost and speed of rolling out fiber networks. The Metnet 60G next-generation customer premises equipment (CPE) connects automatically to the Metnet 60GHz multipoint mesh network extending fiber-like connectivity to customers in an easy-to-deploy, small form factor, low-cost device.

Fiber Extension Faster

The Metnet 60G CPE is part of the Adtran Metnet 60G mesh mmWave fixed wireless access and backhaul solution that operates in the license-free 60GHz band (57GHz-71GHz). The Metnet 60G CPE is a low-cost, environmentally hardened (IP-65 rating) unit that complements fiber-to-the-home (FTTH) services to extend gigabit services up to 500m (1,640ft.) into homes and businesses in locations that are hard to reach with fiber. The Metnet 60G CPE can also be utilized for cost-effective campus LAN extension applications to connect multiple buildings.

Faster Deployment

The Metnet 60G CPE has a built-in electronic beamforming antenna that automatically scans and connects to the Metnet 60G mesh nodes network, resulting in rapid and simple deployment in less than 30 minutes. Flexible mounting options (wall or pole mount) and support for Power over Ethernet allows for anywhere installation, speeding customer acquisition at a low cost per customer add.

Industry-first, Self-Organizing Network

The Metnet 60G system (consisting of nodes and CPE) is built on the industry's first mmWave self-organizing and self-healing network (SON) technology delivering advanced interference avoidance to continuously optimize network performance. Metnet 60G nodes connect autonomously to form Multipoint-to-Multipoint mesh links with neighboring nodes, enabling rapid time-to-market with broadband services. When new nodes are added, the system automatically reorganizes and realigns, enabling faster scaling of the network. In addition, self-organizing, self-healing links automatically reroute traffic in the event of node failure or line-of-sight obstacles providing higher resiliency and redundancy.

METNET 60G

Product Specifications

Mesh Radio Specifications	
Frequency Band	57GHz to 71GHz band
Antenna	Beamforming phase array 21dBi gain
Channels	802.11ad/ay WiGig Channels 1 to 6
Modulation and encoding	13 levels of adaptive encoding MCS 0 – 12
Transmitter and EIRP	19dBm SIGe based; 40dBm EIRP
Radio capacity	1Gbps per CPE
Performance & Attributes	
Beam angle	Horizontal 90° electronic steerable, 5° beam width; Vertical 20° fixed, optional +/- 15° mechanical using tilt bracket
Topologies	Multipoint-to-Multipoint with SON /Point-to-Multipoint, Point-to-Point
Range	Up to 1,640 ft (500 m) Dependent on location, availability, and capacity
Interfaces	1 x RJ45 (100/1000 Base-T)
Max connections	120 CPE per radio
Ethernet Services	Native Ethernet based data service delivery802.1Q (VLAN Tagging) • 802.1Q (VLAN Tagging) • 802.1p QoS (Class of service) • Differentiated Services Code Point QoS (DSCP) • 802.1ad Q-in-Q
Physical Specifications	
Dimensions	7.2" x 4.8" x 1.9" (183mm x 123mm x 48mm) (H x W x D)
Weight	2.75 lbs (~1.25 KG)
Power	PoE 1 x PD Interface; 803.at <25W
Environmental	-40°F to +131°F (-40°C to +55°C)
Regulatory Compliance	Radio: US FCC 47 CFR Part15.255 and EN 302 567, EN 303 413 EMC: US FCC 47 CFR Part15B and EN 301 489 Safety: IEC62368-1:2014, IEC 60950-22:2005, EN50385:2017

Ordering Information

Equipment	Region	Part No.
Metnet 60G CPE, 90° antenna, includes PoE injector with US power cord; color Grey	North and Central America	419326203F2US
Metnet 60Ghz CPE, 90° antenna, includes PoE injector with EU power cord; color Grey	European Union	419326203F2EU
Metnet 60G CPE, 90° antenna, includes PoE injector with UK power cord; color Grey	United Kingdom	419326203F2UK
Metnet 60G CPE, 90° antenna, includes PoE injector with AUS power cord; color Grey	Australia/New Zealand	419326203F2AU
Adtran Procare (required)		
ProCare for Metnet 60G CPE		1100AMFW10M1T1

*Additional license tiers available for quote.
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