

AIRWAVE · DATASHEET

AirWave Beam

60 GHz Point-to-Multipoint Base Station.

SKU · AW-BEAM-01

3.2 GbpsTOTAL
THROUGHPUT**32**SIMULTANEOUS
CLIENTS**6 km**

MAX. RANGE

90°SECTOR
COVERAGE

KEY FEATURES

Carrier-grade wireless, built for the sector.

A next-generation 60 GHz point-to-multipoint base station engineered for wireless ISPs and enterprise outdoor networks — 3.2 Gbps across a 90° sector, 32 simultaneous clients, IP67 for demanding field deployments.

60 GHZ PERFORMANCE

High-capacity 802.11ay radio

802.11ay-based 60 GHz radio with adaptive modulation (16QAM, QPSK) and channel bandwidths up to 2160 MHz delivers up to 3.2 Gbps aggregate throughput.

INTERFACES

Dual high-speed ports, PoE Out

(1) 10 GbE RJ45, (1) 1.0 GbE RJ45 PoE Out, and (1) 10G SFP+ ports provide flexible, high-capacity backhaul connectivity for any network architecture.

ANTENNA

Wide 90° sector coverage

Integrated 20 dBi sector antenna with 90° azimuth and 90° elevation beamwidth supports up to 32 simultaneous client connections at ranges up to 6 km.

SYNCHRONISATION

Integrated GPS receiver

Built-in GPS enables precise location data, accurate time synchronisation, and a dedicated LED GPS status indicator for easy field diagnostics.

DURABILITY

All-weather outdoor build

IP67-rated enclosure combining UV-stabilised polycarbonate and aluminium alloy withstands -40 to 60°C operating temperatures and wind loads up to 200 km/h.

COMPLIANCE

NDAA compliant & certified

NDAA compliant with WPA2-PSK (AES) encryption. FCC, IC, and CE certified for North American and international enterprise deployments.

SPECIFICATIONS

System, radio, hardware, compliance.

SYSTEM

Total Throughput	3.2 Gbps
Supported Clients	32
Max. Range	Connecting to AirWave Ultra: up to 6 km
Encryption	WPA2-PSK (AES)

RADIO FREQUENCY

Operating Frequency	57 – 71 GHz (Worldwide)
Channel Bandwidth	2160, 1080, 540 MHz
Operating Channels	58320 / 59400 / 60480 / 61560 / 62640 / 63720 / 64800 / 65880 / 66960 / 68040 / 69120 / 70200 / 70560 MHz
Modulation	16QAM, QPSK (Adaptive)
Antenna Gain	16 dBi
Polarisation	Dual-Linear
Azimuth Scan Range	90°
Elevation Scan Range	90°

HARDWARE

Processor	Quad-core ARM® Cortex®-A72 at 2.2 GHz
Memory	3 GB
Networking Interface	(1) 10 GbE RJ45 port, (1) 1.0 GbE RJ45 PoE Out, (1) 10G SFP+ port
Max. Power Consumption	24 W

ENVIRONMENTAL & COMPLIANCE

Ambient Operating Temperature	-40 to 60°C (-40 to 140°F)
Ambient Operating Humidity	5 to 95% non-condensing
Certifications	FCC, IC, CE
NDAA Compliant	Yes

SPECIFICATIONS · CONTINUED

Power, mechanics, and software.

POWER & INDICATORS

Power Method	Passive PoE 4-pair (1,2+; 3,6-) (4,5+; 7,8-) Passive PoE 2-pair (4,5+; 7,8-) for 44 – 54V DC
Supported Voltage Range	44 – 54V DC 22 – 27V DC
Power Supply	48V DC, 0.65A 10 GbE PoE adapter (included)
GPS	Integrated
Buttons	(1) Factory Reset
LEDs	Power — flashing white: bootup · white: not connected · blue: connected · flashing blue: locate Ethernet — (2) flashing blue: traffic detected GPS — blue: receiving 4+ satellite signals Link — white: 5 GHz link · blue: 60 GHz link SFP+ — (1) flashing blue: SFP+ traffic detected

MECHANICAL

Dimensions	200 × 200 × 100 mm
Weight	1.5 kg (3.3 lb)
Enclosure Material	UV-stabilised polycarbonate, aluminium alloy
Pole Mount Diameter	23.2 to 120 mm
Wind Loading	109.8 N at 200 km/h (25 lbf at 125 mph)
Weatherproofing	IP67

SOFTWARE

Operating Mode	PtMP Access Point
Application	AirOS
Network	Bridge Mode
Features	Discovery Protocol, Auto Backup
Services	WaveView (NMS), Ping Watchdog, NTP Client, SNMP
Tools	Cable Test, Antenna Alignment, Ping, Site Survey, Speed Test, Traceroute

Fibre-class capacity, without the civil works.

The AirWave Beam pairs with AirWave Ultra subscriber radios to deliver a single-sector PtMP network that replaces fibre in the last kilometre — for wireless ISPs, giga-project campuses, and mission-critical enterprise sites. One PoP, three sectors, hundreds of addressable premises, commissioned in days.

- 3.2 Gbps aggregate throughput per sector
- 32 simultaneous subscriber terminals, up to 6 km
- IP67, -40 to 60°C, wind-rated to 200 km/h
- Managed by WaveView NMS with Auto Backup