

GigaBeam Long Range

The GigaBeam™ is an airMAX

® 60 GHz radio designed for low interference and high-throughput connectivity of up to 1+ Gbps.

For the 60 GHz link, the GigaBeam supports full bandwidth use of 2.16 GHz and includes a 5 GHz radio for failover. The dedicated management radio allows easy setup via Wi-Fi.



Mechanical

Dimensions	Ø415 x 303 mm (Ø16.34 x 11.93")
Weight	Without Mount: 1.3 kg (2.87 lb) With Mount: 1.8 kg (3.97 lb)
Enclosure Characteristics	Aluminum / UV Stabilized Polycarbonate

Hardware

Processor	Quad-Core ARM Cortex A7
Memory	256 MB DDR3
Networking Interface	10/100/1000 Mbps Ethernet RJ45
RF Connections	Internal
Max. Power Consumption	11W
Power Method	Passive PoE (Pairs 4, 5+; 7, 8-)
Power Supply	24VDC, 0.5A Gigabit PoE Adapter
Supported Voltage Range	22 to 26VDC
ESD/EMP Protection	Air/Contact: ± 24kV
Operating Temperature	-40 to 60° C (-40 to 140° F)
Operating Humidity	5 - 95% Noncondensing
Certifications	FCC, IC, CE

LEDs

Power	Flashing White: Boot up in Progress White: System Ready, Ubiquiti® Internet Service Provider (UISP™) Not Configured, Not Connected Flashing Blue: System Ready, UISP Configured, but Cannot Connect Blue: System Ready, UISP Configured and Connected
Ethernet	Flashing Blue: Ethernet Traffic Detected
5G	Blue: Active Connection
60G	Blue: Active Connection

Software

OS	airOS®
Operating Modes	PtP
Ubiquiti Specific Features	Integrated 60 GHz and 5 GHz Radios, Discovery Protocol
Security	WPA2 AES Only
Dashboard	Yes
Wireless Settings	Yes
Network Settings	Yes
System	Yes
Services	UISP, Ping Watchdog, Web Server, SSH Server, NTP Client, System Log, Device Discovery
Tools	Antenna Alignment Tool, Discovery Utility, Traceroute, Speed Test
Minimum Software Requirements	Any Modern Web Browser

RF

Operating Frequency*	U-NII-1	5150 - 5250 MHz
	U-NII-2A	5250 - 5350 MHz
	U-NII-2C	5470 - 5725 MHz
	U-NII-3	5725 - 5850 MHz
		57,000 - 66,000 MHz
		5150 - 5875 MHz 57,000 - 66,000 MHz

*** Depends on regulatory region.**

Max. Conducted TX Power	25 dBm (5 GHz)	
Channel Bandwidth	60 GHz	2160 MHz
	5 GHz	20/40/80 MHz
Management Radio	US/CA	2412 - 2462 MHz
	Worldwide	2412 - 2472 MHz
Antenna Gain	60 GHz	38 dBi
	5 GHz	11 dBi

Radio Sensitivity airMAX AC

5 GHz TX Specificatic

Data Rate	Avg Power (dBm)	Tolerance (dB)
1x BPSK ($\frac{1}{2}$)	25	± 2
2x QPSK ($\frac{1}{2}$)	25	± 2
2x QPSK ($\frac{3}{4}$)	25	± 2
4x 16QAM ($\frac{1}{2}$)	25	± 2
4x 16QAM ($\frac{3}{4}$)	25	± 2
6x 64QAM ($\frac{2}{3}$)	24	± 2
6x 64QAM ($\frac{3}{4}$)	22	± 2
6x 64QAM ($\frac{5}{6}$)	22	± 2
8x 256QAM ($\frac{3}{4}$)	21	± 2
8x 256QAM ($\frac{5}{6}$)	21	± 2

5 GHz RX Specifications

Data Rate	Avg Power (dBm)	Tolerance (dB)
1x BPSK ($\frac{1}{2}$)	-95	± 2
2x QPSK ($\frac{1}{2}$)	-95	± 2
2x QPSK ($\frac{3}{4}$)	-93	± 2
4x 16QAM ($\frac{1}{2}$)	-90	± 2
4x 16QAM ($\frac{3}{4}$)	-86	± 2
6x 64QAM ($\frac{2}{3}$)	-83	± 2
6x 64QAM ($\frac{3}{4}$)	-77	± 2
6x 64QAM ($\frac{5}{6}$)	-74	± 2
8x 256QAM ($\frac{3}{4}$)	-69	± 2
8x 256QAM ($\frac{5}{6}$)	-66	± 2

