GBE Datasheet

GigaBeam

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.



GigaBeam™

Mechanical	
Dimensions	Ø140 x 44 mm (Ø5.5 x 1.7")
Weight	376 g (13.3 oz)
Enclosure Characteristics	UV Resistant Polycarbonate
Hardware	
Processor	Quad-Core ARM Cortex A7
Memory	256 MB DDR3
Networking Interface	10/100/1000 Mbps Ethernet RJ45
RF Connections	Internal

LEDs	Power/Ethernet/5G/60G
Max. Power Consumption	11W
Power Method	Passive PoE (Pairs 4, 5+; 7, 8-)
Power Supply	24VDC, 0.5A Gigabit PoE Adapter
Supported Voltage Range	24V ±10% (22 - 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
Software	
OS	airOS [®]
Operating Modes	PtP, PtMP (Future Firmware Upgrade)

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	UNMS, 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		

Radio Sensitivity air MAX AC

5 GHz TX Specifications

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

5 GHz RX Specifications

Data Rate	Avg Power (dBm)	Tolerance (dB)
1x BPSK (1/2)	-95	±2
2x QPSK (1/2)	-95	±2
2x QPSK (³ / ₄)	-93	±2
4x 16QAM (½)	-90	±2
4x 16QAM (³ / ₄)	-86	±2
6x 64QAM (² / ₃)	-83	±2
6x 64QAM (³ / ₄)	-77	±2
6x 64QAM (⁵ / ₆)	-74	±2
8x 256QAM (³ / ₄)	-69	±2
8x 256QAM (⁵ / ₆)	-66	±2

