## **D**ATASHEET



airMAX® ac CPE with Dedicated Management Radio Model: LBE-5AC-Gen2

Lightweight, Low-Cost Solution

Full Adjustment Flexibility

Quick Assembly and Installation



## **Overview**

Ubiquiti Networks launches the latest generation of airMAX® CPE (Customer Premises Equipment), the LiteBeam® 5AC Gen 2, with dedicated Wi-Fi management.

## **Improved Noise Immunity**

The LiteBeam 5AC Gen 2 directs RF energy in a tighter beamwidth. With the focus in one direction, the LiteBeam 5AC Gen 2 blocks or spatially filters out noise, so noise immunity is improved. This feature is especially important in an area crowded with other RF signals of the same or similar frequency.

## **Integrated Design**

Ubiquiti's InnerFeed® technology integrates the radio into the feedhorn of an antenna, so there is no need for a cable. This improves performance because it eliminates cable losses.

Featuring high performance and innovative mechanical design, the LiteBeam 5AC Gen 2 is versatile and cost-effective to deploy.

# Software air OS 8

airOS® v8 is the revolutionary operating system for Ubiquiti® airMAX ac products.

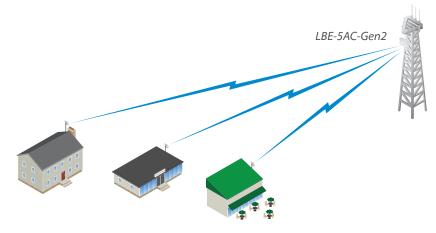
#### **Powerful Wireless Features**

- Access Point PtMP airMAX Mixed Mode
- airMAX ac Protocol Support
- Long-Range Point-to-Point (PtP) Link Mode
- Selectable Channel Width
  - PtP: 10/20/30/40/50/60/80 MHz
  - PtMP: 10/20/30/40 MHz
- Automatic Channel Selection
- Transmit Power Control: Automatic/Manual
- Automatic Distance Selection (ACK Timing)
- Strongest WPA2 Security

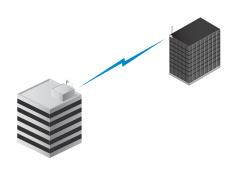
## **Usability Enhancements**

- airMagic® Channel Selection Tool
- · Redesigned User Interface
- Dynamic Configuration Changes
- Instant Input Validation
- HTML5 Technology
- · Optimization for Mobile Devices
- Detailed Device Statistics
- Comprehensive Array of Diagnostic Tools, including RF Diagnostics and airView® Spectrum Analyzer

## **Application Examples**



LiteBeam as a cost-effective WISP deployment in an airMAX ac Point-to-MultiPoint network.



A LiteBeam on each side of a Point-to-Point link.



## **UNMS App**

The LiteBeam 5AC Gen 2 integrates a separate Wi-Fi radio for fast and easy setup using your mobile device.

## **Accessing airOS via Wi-Fi**

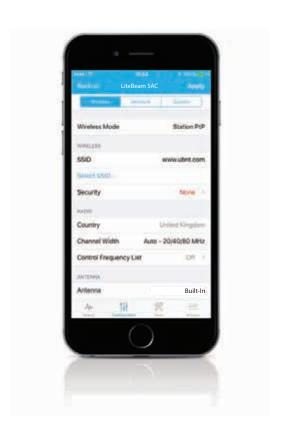
The UNMS™ app provides instant accessibility to the airOS configuration interface and can be downloaded from the App Store (iOS) or Google Play™ (Android). UNMS allows you to set up, configure, and manage the LiteBeam 5AC Gen 2. It offers the following options once you're connected or logged in to the device:

**Status** Check link status information or the basic configuration settings of the LiteBeam 5AC Gen 2.

**Configuration** Change or update the existing configuration of the LiteBeam 5AC Gen 2.

**Tools** Access tools for initial installation and configuration of the LiteBeam 5AC Gen 2.

**Actions** Back up or update the configuration, upload new firmware, reboot the device, reset the device to factory defaults, access the airOS UI in the web browser, or disconnect from the LiteBeam 5AC Gen 2.



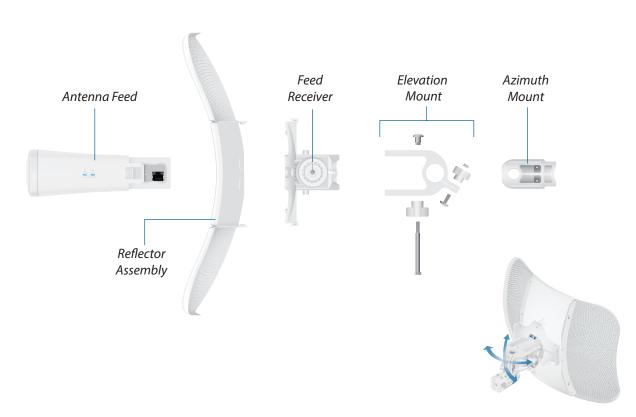
## **Hardware Overview**

#### **Full Adjustment Flexibility**

The LiteBeam 5AC features a two-mount system that provides adjustment flexibility along both axes for versatile mounting options. The mounting system, coupled with the built-in bubble level, enables quick and easy alignment.

## **Improved Mounting and Surge Protection**

Featuring enhanced protection against power surges, the LiteBeam 5AC Gen 2 offers a more robust mount with separate azimuth and elevation adjustments.



## **Specifications**

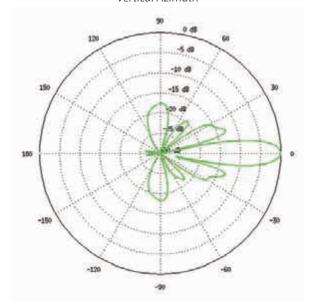
	LBE-5AC-Gen2				
Dimensions	358 x 271.95 x 272.5 mm (14.09 x 10.71 x 10.73")				
Weight Without Mount With Mount		800 g (1.76 lb) 980 g (2.16 lb)			
Power Supply		24V, 0.3A Gigabit PoE Adapter (Included)			
Max. Power Consumption		7W			
Power Method		Passive PoE (Pairs 4, 5+; 7, 8 Return)			
Supported Voltage Range		24V ± 10%			
Gain		23 dBi			
Networking Interface		(1) 10/100/1000 Ethernet Port			
Processor Specs	MIPS 74Kc				
Memory		64 MB DDR2			
LEDs		Power, Ethernet			
Channel Sizes	PtP Mode PtMP Mode				
	10/20/30/40/50/60/80 MHz	10/20/30/40 MHz			
Enclosure Characteristics		Reflector (SGCC 0.6T) / Plastic: PC			
Mounting		Pole-Mounting Kit (Included)			
Wind Loading		275 N @ 200 km/h (61.8 lbf @ 125 mph)			
Wind Survivability		200 km/h (125 mph)			
ESD/EMP Protection		± 24 kV Contact / Air			
Operating Temperature		-40 to 70° C (-40 to 158° F)			
Operating Humidity		5 to 95% Noncondensing			
Certifications	CE, FCC, IC				

Operating Frequency (MHz)						
Worldwide	5150 - 5875					
USA	U-NII-1: 5150 - 5250	U-NII-2A: 5250 - 5350 MHz	U-NII-2C: 5470 - 5725 MHz	U-NII-3: 5725 - 5850		

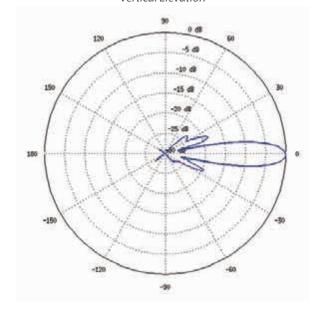
Management Radio (MHz)				
Worldwide	2412 - 2472			
USA	2412 - 2462			

LBE-5AC-Gen2 Output Power: 25 dBm									
TX Power Specifications				RX Power Specifications					
Modulation	Data Rate	Avg. TX	Tolerance	Modulation	Data Rate	Sensitivity	Tolerance		
airMAX ac	1x BPSK (½)	25 dBm	± 2 dB	airMAX ac	1x BPSK (½)	-96 dBm Min.	± 2 dB		
	2x QPSK (1/2)	25 dBm	± 2 dB		2x QPSK (1/2)	-95 dBm	± 2 dB		
	2x QPSK (¾)	25 dBm	± 2 dB		2x QPSK (¾)	-92 dBm	± 2 dB		
	4x 16QAM (1/2)	25 dBm	± 2 dB		4x 16QAM (1/2)	-90 dBm	± 2 dB		
	4x 16QAM (¾)	25 dBm	± 2 dB		4x 16QAM (¾)	-86 dBm	± 2 dB		
	6x 64QAM ( <sup>2</sup> / <sub>3</sub> )	25 dBm	± 2 dB		6x 64QAM (3/3)	-83 dBm	± 2 dB		
	6x 64QAM (¾)	24 dBm	± 2 dB		6x 64QAM (3/4)	-77 dBm	± 2 dB		
	6x 64QAM (5%)	23 dBm	± 2 dB		6x 64QAM (%)	-74 dBm	± 2 dB		
	8x 256QAM (3/4)	21 dBm	± 2 dB		8x 256QAM (3/4)	-69 dBm	± 2 dB		
	8x 256QAM (%)	21 dBm	± 2 dB		8x 256QAM (5%)	-65 dBm	± 2 dB		

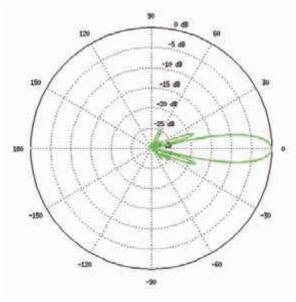
### Vertical Azimuth



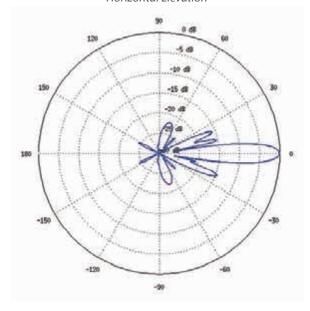
Vertical Elevation



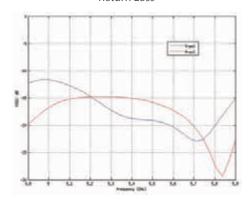
Horizontal Azimuth



Horizontal Elevation



Return Loss





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