



LiteBeam® AC GEN2

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 airOS[®]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 to create a reliable wireless bridge.



LiteBeam 5AC Ge 04:18:D6:4E3 TX PO	E2:18 CAPACITY	AIRTIME	SSID AC		0.4%	40.37 ТИКОЦОНИЦТ САРАСТТУ 498.42 Маря	LiteBeam 5AC G F0:9F:C2:5E:22:50 TX POWER -4dBm
	5750 (40) MHz						
	5,740	5,760	5,780	5,800		5,820	5,840
LOCAL SIGNAL -6	3/-64 dBm		NOISE FLOOR -91 dBm	REMOTE SIGNAL ~	44/-49 _{dBm}		NOISE FLOOR -
EXPECTED RATE &	x		CURRENT RATE 8x (256QAM 2x2)	EXPECTED RATE 8	x		CURRENT RATE 8x (256QA
1X 2X	4X	άX	gx:	1X 2X	4X	۵X	BX.
			800				
			400 Mbps				
	acity RX Capacity TX	◆ Speed RX → Spe	Mbps	Capa	ncity RX 🔹 Capacity TX	-&- Speed RX - + Sp	eed TX 📲 Latency
Capa RATE DISTRIBUTIO	acity RX Capacity TX	● Speed RX → Spi	Mbps	RATE DISTRIBUTIO		◆ Speed RX → Sp ax	eed TX Latency EX
Capa RATE DISTRIBUTIO	acity RX Capacity TX -	_	eed TX Latency	RATE DISTRIBUTIO	и		
Capa RATE DISTRIBUTIO	acity RX Capacity TX -	_	Mbps red TX III Latency EX		и		
Cape RATE DISTRIBUTIO 1X LOCAL DEVICE DEVICE MODEL WIRELESS MODE	actry BX Capacity 1X - ON 2X 4K LiteBeen SAC Gen2 AP PLMP airMAX AC	6X VERSION LAN SPEED	Maps end IX © Latency EX More Datable © v9.1.2-bets2-es 32877 (KC) 1000 Maps-Full	RATE DISTRIBUTIO	2X 4X LiteBeam SAC Gen2 Station PtMP	ox VERSION LAST IP	8.12-beta2-cs 10.10.10.92
Cape RATE DISTRIBUTIO 12 LOCAL DEVICE DEVICE MODEL WIRELESS MODE NETWORK MODE	acity EX Capacity TX - ON 2X 4K Uteleem SAC Gen2 AP PLMP al/MAX AC Roder	ex VERSION LAN SPEED CINR	Maps end TX: @ Laterary EX: EX: EX: EX: EX: EX: EX: EX:	RATE DISTRIBUTIO 3X REMOTE DEVICE DEVICE MODEL WIRLESS MODE NETWORK MODE	DN 2X 4X LiteBeam SAC Gen2 Station PtMP Router	ax VERSION LAST IP CINR	EX VB.12-beta2-cs 10:10:10:92 7:26:48
Cape CAPE	acity EX Capacity IX - ON 22 46 Uteleam SAC Gen2 AP FURM al-MAX AC Roter 2017-03-015/23:03	ex VERSION LAN SPEED CINR DISTANCE	Mgs sd TX * Latency K More colority = 41.29452-cs.23877 0K0 2000 Mgs Part -24.68 2.2 seles(3.03.46)	RATE DISTRIBUTIO	2X 4X LiteBeam SAC Gen2 Station PtMP	ox VERSION LAST IP	8.12-beta2-cs 10.10.10.92
Cape RATE DISTRIBUTIO IX LOCAL DEVICE DEVICE MODEL WIRLESS MODE NATWORK MODE DATE UPTIME	actiny IX © Capacity IX • ON 22 44 Uteleam SAC Gen2 LUteleam SAC Gen2 GUI-10-20-30-115-23-03 0-13-20-4	ox Version Lan speed Cinr Distance TX/RX bytes	Maps ed TX @ Laterary EX EX EX EX EX EX EX EX EX EX	RATE DISTRIBUTIO	DN 2X 4X LiteBeam SAC Gen2 Station PMMP Router 2017-03-011523.02	eX VERSION LAST IP CINR DISTANCE	ux. 12-beta2-cs 10.10.10.92 +26.68 0.2 miles (0.3 km)
Cape CAPE	acity EX Capacity IX - ON 22 46 Uteleam SAC Gen2 AP FURM al-MAX AC Roter 2017-03-015/23:03	ex VERSION LAN SPEED CINR DISTANCE	Mgs sd TX * Latency K More colority = 41.29452-cs.23877 0K0 2000 Mgs Part -24.68 2.2 seles(3.03.46)	REMOTE DEVICE JX REMOTE DEVICE DEVICE MODEL WIRLESS MODE NETWORK MODE DATE UPTIME	DN 2x 4x LiteBeam SAC Gen2 Station PtMP Rooter 2017-09-011523:02 01:34:45	ex VERSION LAST IP CINR DISTANCE TX/RXEVTES	v8.12-beta2-cs 10.10.10.02 +26.65 0.2.miles (0.3.km) 931 K / 1.07 M
Cape RATE DISTRIBUTIO 1X LOCAL DEVICE DEVICE MODEL WIRELESS MODE NETWORK MODE DATE UPTIME SECURITY	LiteBeam SAC Gen2 AP 1980 - MAX CR Reader 2017-9-01 15:2203 01:2504 WHA2	ex VERSION LAN SPEED CINR DISTANCE TAXIX BYTES CABLE SHR	Maps ed TX © Lateracy EX Visit 2-Visit 2- Visit 2-Visit 2-Visit 2- Visit 2-Visit 2- Visit 2-Visit 2- Visit 2-Visi	RATE DISTRIBUTIO	DN 2x 4x LiteBeam SAC Gen2 Station PMAP Router 2017-0-01 15:23:02 01:34:35 01:34:15	ex VERSION LAST IP CINR DISTANCE TURKE BYTES CABLE SNR	EX V8.12-beta2-cs 10.10.10.92 726 dB 0.2 miles (0.3 km) 931 K / 107 M +30 dB

eBeam^{age}senz

UMobile 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 UMobile App provides instant accessibility to the airOS configuration interface and can be downloaded from the App Store (iOS) or Google Play[™] (Android). UMobile 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.



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

Wireless Mode

elect SSID

WIRELES

Security

RADIC

Country

ANTENNA Antenna

A

Channel Width

Control Frequency List

SSID

Station PtP

www.ubnt.com

None

Off

Built-In

United Kingdon

Auto - 20/40/80 MHz

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-Ge	en2			
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 F	oE Adapter (Included)
Max. Power Consumption						7W
Power Method					Passive PoE (Pairs 4, 5+; 7, 8 Return)
Supported Voltage Range						$24V \pm 10\%$
Operating Frequency	Worldwide	USA: U-NII-1	USA: U-	NII-2A	USA: U-NII-2C	USA: U-NII-3
	2412 - 2462 MHz 5150 - 5875 MHz	5150 - 5250 MHz	5250 - 53	50 MHz	5470 - 5725 MHz	5725 - 5850 MHz
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			Hz		
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

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 (1/2)	25 dBm	$\pm 2 \text{ dB}$	airMAX ac	1x BPSK (1/2)	-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	$\pm 2 \text{ dB}$		2x QPSK (¾)	-92 dBm	± 2 dB	
	4x 16QAM (½)	25 dBm	± 2 dB		4x 16QAM (1/2)	-90 dBm	± 2 dB	
	4x 16QAM (¾)	25 dBm	$\pm 2 \text{ dB}$		4x 16QAM (¾)	-86 dBm	± 2 dB	
	6x 64QAM (⅔)	25 dBm	± 2 dB		6x 64QAM (⅔)	-83 dBm	± 2 dB	
	6x 64QAM (¾)	24 dBm	± 2 dB		6x 64QAM (¾)	-77 dBm	± 2 dB	
	6x 64QAM (%)	23 dBm	± 2 dB		6x 64QAM (5%)	-74 dBm	± 2 dB	
	8x 256QAM (¾)	21 dBm	± 2 dB		8x 256QAM (¾)	-69 dBm	± 2 dB	
	8x 256QAM (%)	21 dBm	$\pm 2 \text{ dB}$		8x 256QAM (%)	-65 dBm	± 2 dB	



 $\begin{array}{c} 90 \\ 0 \\ -5 \\ 0 \\ -5 \\ 0 \\ -5 \\ -5 \\ 0 \\ -25 \\$

Vertical Elevation

Horizontal Azimuth





Horizontal Elevation





Return Loss

5.4 frequency (GHz)

-30 L

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: www.ubnt.com/support/warranty ©2017 Ubiquiti Networks, Inc. All rights reserved. Ubiquiti, Ubiquiti Networks, the Ubiquiti U logo, the Ubiquiti beam logo, airMAX, airOS, airMagic, InnerFeed, and LiteBeam are trademarks or registered trademarks of Ubiquiti Networks, Inc. in the United States and in other countries. All other trademarks are the property of their respective owners.