DATASHEET

LiteBeam[®] AC GEN2

airMAX® ac CPE with Dedicated Management Radio

U

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.





LiteBeam SAC G	07- 39.11		0.	1 km	· · · ·	40.37	LiteBeers SAC
0+ JACA 4 TRO	Aden Aden	ARTIME			0.4 s	498.42	risin (2.8525) Tx Powski Halter
	535 40000	\$20	L.W.	La La		A	120
LOCAL SIGNAL	63 / -64 aten		MOREALDOR 42484	REMOTE SIGNAL	44/-49 _{ctm}		NDME PLOO
ENPLICIED BATE	a.		CURRENT BATE BOOSSIGMARD	EXPECTED RATE	ú3		CONDUCTION OF THE OTHER
	- 47			11 20			
10 900							
15 32		Terrari adore a set			and the second second second	TRANSPORT IN COMPANY	
5 X	READ TO THE CARACTERISTIC	SIGNAL HORE & HE	100 (00)		Real-Internation Internation	SIGNAL HOUSE & HOT	Dididid
13	REFERENCESSFORMERS	anant note to m	200 (000		aga (Alag Calactro Seco	SOME HOUR & HOT	amana)
	HEADTINE CANADANISASE	broad, where is an	800 800		101010-0010-000000	3.044L.003E.6-603	annera.)
		Thermal index from	800 800			ACHALHOOR & SHT	onnea.)
	readmined choice my violates	THE WAY WE REAL	400 400 400 400			agent nous r em	00000
	and an and a second sec	ternel soft ford	900 900 900 Mate		eta Jest Guidtheiten	9.0000 0.0000 k 000 + 140000 k 000	(English
	and a state of the	Speed BX -+ 1	800 800 800 800 Maja 12. 10. 10. 10. 10.		nits () • Capacity Tr	- 1999 - 100 - 100 - 1999 - 10	anna e stime
G X	and an and a second sec	 Speed BX + 1 	800 800 800 800 800 800 800 800 800 800	ANT DISTRIBUTI	nda free outlike the second	- 1900 AL	presi TX = Lineary
G X	RELATED CARACTERIST	Scool, which do not	erroreve) and 12 a campa and 12 a campa a	RATE DISTRIBUTI	Training Constraints (2010) many 62 Capacity TX ON 20 00		pent TX + Long
Can	ECLIMATICAL CALLER AND	 Speed IX, +3 Speed IX, +3 	erropery and D = 0 campa and D = 0 campa and campa campa and campa campa and campa campa and campa campa campa and campa campa cam	RATE DISTRIBUTI	Total Alexandro Andreas State and State Capacity TX ON 2 0	2(34, 102) + 9 + 9,000(1) + 9	perel TX + Lange
Cq extrementation in tocal device	ECONTRACACIÓN MAISTEO Assing EX & Casación (C.S.) 104 104 104 104 104 104 104 104 104 104	• Speed XX + 1	eronext and 0 = 0 any and 0 = 0 any any any 0 = 0 any any 0 = 0 any 0 = 0 any any 0 = 0 any 0 = 0 any any 0 = 0 any 0 = 0 any 0 = 0 any 0 = 0 any 0 = 0 any any 0 = 0 any 0	RATE DISTRIBUTI 70 BEMOTE DEVICE DEVICE MODE	Example of American Sectors (Sectors (S	2(344, 1022, 647 + 10-012, 1022, 647 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	errent TE + Long rent TE + Long rent TE + Long
B X	Eden in Electric Constantion and lay EX	Strate whet is on Signed DX == 3 or strates (ANSTRD)	errorean error () error	0 Car ANTE DISTANSION 10 REMOTE OFFICE DOCCOMMENT NUMBER SED	Experience of the Constraint o	10000 1007 1007 + Specific + S - Specific - Spe	erel X + Less el 13 besto 14 13 besto 14 10 besto
B X	EXCENSION AND AND AND AND AND AND AND AND AND AN	 Speed whether is not in the second sec	And the second s	0 care de la care de l	ELSIS Contraction Contraction Contraction Contraction Lindern 3AC (erc) Elsidern 3AC (erc) Elsidern 3AC (erc) Elsidern 3AC (erc)	NORME HOLE & HAT + Transit B.L Su - Su	entrance and TC + Long 4532 best co is a succe 1968
B X	RECENTIONNESS REFERENCE 20 40 Unders SAC Sac Recent Buttables SAC Sac Recent Buttables SAC Sac Recent	• Speed 23 ++ 3 • Speed 23 ++ 3 • * • • • • • • •	erences erent (s = e camage erent (s = e camage erent (s = e camage erent (s = e camage erent (s = e camage) erent (s = e cama	RATE DISTRIBUTI	E23.5 - Control 223 Control 22 Control 22 Control 23 Control 2	*00000 + 50 + 10000 = 1 + 50 - 10000 = 1000 - 10000 = 1000 - 10000 = 10000 - 10000 = 10000	veral TX = Cannot veral TX = Cannot veral States can a statute cide/b
Car C	EXCENSION AND CONTRACT	- Speed (A) ++ 3 - Speed (A) ++ 3 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4	400 0000 400 0000 400000 400 0000 400 0000 400000 400 0000 400 0000 400 0000 400 0000 400 0000 400 0000	READING CONTRACTOR	Lindsen SAC (esc) Lindsen SAC (esc) Tricker Star Konse 2017 - 00 (1333) 2018 - 00 (1333) 2018 - 00 (1333)		An and the second secon
	COLORED AND CONTROL OF	• Speed EX + + 1 • Speed EX + + 1 • Speed EX + + 1 • Speed EX + - 1 • Speed EX +	ACCENT OF A CONSTRUCT	EEMOTE DEVICE TO DOUCLOUGH ANNUAL SALES ANNUAL SALES ANNU	E211 - Control 211 -	۲۰۰۰ (۱۹۹۳) (۱۹۹۳) (۱۹۹۳) (۱۹۹۳) ۱۹۹) ۱۹۹	visit a second the second the second the second the second term of term o
3 X 6 X 6 X 7 X 6 X 7	EXCLUSION CONTRACT AND THE AND	• Speed IX + 1 • Speed IX + 1 (4) (4) (4) (4) (4) (4) (4) (4)	400 0000 400 0000 400000 400 0000 400 0000 400000 400 0000 400 0000 400 0000 400 0000 400 0000 400 0000	0 cm RATE DETUNISOT 10 REMOTE CEVICE DETUNIS REMOTE CEVICE DETUNIS RETURNES RE	Control =	400004 (1002 (100 + 10000 (100 100004 100004 100004 100004 100005 700005 700005 7000007 1000007	even TC
Car C	COLORED COMPANY COLORED COMPANY COLORED COMPANY COLORED COMPANY	Strength	1000000 00 00 00 00 00 00 00 00	Compared and a c	Canada a conservation Canada a conservation	40000 4000000	even TX Common even TX Common even TX Common even TX Common even TX even TX ev

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

Wireless Mode

WIRELESS

Security

Country

Antenna

ha

Channel Width

Control Frequency List

SSID

Station PtP

www.ubnt.com

None

Ciff

Built-In

United King

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

DimensionsSSS x 271.95 x 272.5 mm (14.09 x 10.71 x 10.73 mm)Weight Without MountSSS x 271.95 x 272.5 mm (14.09 x 10.71 x 10.73 mm)Power SupplyConstructionPower SupplyConstructionMax. Power ConsumptionConstructionPower MethodConstructionSupported Voltage RangeConstructionGainConstructionProcessor SpecsConstructionMemoryConstructionChange MethodConstructionPoter Supported Voltage RangeConstructionILDsConstructionPoter Supported Voltage RangeConstructionMemoryConstructionChange MethodConstructionILDsConstructionILDsConstructionMuntingConstructionMountingConstructionMuntingConstructionStorker CharacteristicsConstructionMind SurvivabilityConstructionStorker ProtectionConstructionStorker ProtectionConstructionStorker ProtectionConstructionStorker ProtectionConstructionStorker ProtectionConstructionConstructionConstructionStorker ProtectionConstructionConstructionConstructionStorker ProtectionConstructionConstructionConstructionConstructionConstructionConstructionConstructionConstructionConstructionConstructionConstruction		LBE-5AC-Gen2			
Wight Without MountSong (17 dis) Song (21 dis)Power SupplyPower SupplyMax. Power ConsumptionPower MethodSupported Voltage RangeGainPotexorking InterfaceProcessor SpecsMemoryChannel SizesPotendationProcessor SpecsProcessor Specs </td <td>Dimensions</td> <td colspan="3">358 x 271.95 x 272.5 mm (14.09 x 10.71 x 10.7</td>	Dimensions	358 x 271.95 x 272.5 mm (14.09 x 10.71 x 10.7			
Power Supply24V,0.3A Gigabit PoE Adapter (Included)Max. Power ConsumptionPower MethodSupported Voltage RangeGainGainNetworking InterfaceProcessor SpecsMemoryChannel SizesPotogoto CharacteristicsInterface10/20/30/40/50/60/80 MHzChannel SizesPotogoto CharacteristicsMuntingMuntingStoracteristics <td>Weight Without Mount With Mount</td> <td colspan="4">800 g (1.7 980 g (2.1</td>	Weight Without Mount With Mount	800 g (1.7 980 g (2.1			
Max. Power ConsumptionImage: Power MethodPassive POE (Pairs 4, S+r, 7, 8 Return)Power MethodPassive POE (Pairs 4, S+r, 7, 8 Return)Supported Voltage RangeCallCallGainStar 2 CallCallNetworking InterfaceCallCallProcessor SpecsCallCallMemoryCallCallLEDsPower Left PowerMenoryPower Left PowerChannel SizesPtP ModePtW ModeInfolosion/Gald CallTol/20/30/40 MHzInfolosor CharacteristicsCallSteffect Or (SGC 0.67) / Plastic) PCMind LoadingCallCallWind SurvivabilityCallCallSpecting TemperatureCallCallOperating TemperatureCallSteffect Or (Call Call Call)Operating HumidityGallSteffect Or (Call) Steffect Or	Power Supply	24V, 0.3A Gigabit PoE Adapter (Inclu			
Power MethodPassive PoE (Pairs 4, 5+; 7, 8 Return)Supported Voltage RangeGainGainNetworking InterfaceProcessor SpecsMemoryGannel SizesP10/2003/04/05/60/80 MHzDrocestor SpecsMuntingP10/2003/04/05/60/80 MHzDirocestor SpecsMuntingP10/2003/04/05/60/80 MHzMuntingMuntingSpecificationsSpecificationsSpecificationsOperating TemperatureOperating HumidityGettificationsStep Specifications	Max. Power Consumption	7			
Supported Voltage Range24V±10%GainGain23 dBiNetworking Interface(1) 10/1000 Ethernet PortProcessor SpecsGIMIPS 74kcMemoryGIGILEDsProvensePower, EthernetChannel SizesPtP ModePtMP Mode10/20/30/40/50/60/80 MHz10/20/30/40 MHzEnclosure CharacteristicsGISteffector (SGCC 0.6T) / Plastic: PCMountingGIPtP ModePole-Mounting Kt (Included)Wind LoadingGISteffector (SGC 0.6T) / Plastic: PCWind SurvivabilityGISteffector (SGC 0.6T) / Plastic: PCSD/EMP ProtectionGISteffector (SGC 0.6T) / Plastic: PCOperating TemperatureGISteffector (SGC 0.6T) / Plastic: PCOperating HumidityGISteffector (SGC 0.6T) / Steffector (SGC 0.6T) / Steffector (SGC 0.6T) / Steffector (SGC 0.6T) / Plastic: PCCertificationsGISteffector (SGC 0.6T) / Plastic: PC	Power Method	Passive PoE (Pairs 4, 5+; 7, 8 Return)			
GainC23 dBiNetworking Interface(1) 10/1000 Ethernet PortProcessor SpecsCMemoryCLEDsCChannel SizesPtP ModeP10/203/04/05/06/08 0MHzPtMP ModeIn1/20/30/40/50/60/80 MHzCFaclosure CharacteristicsCMountingCWind LoadingCWind SurvivabilityCSD/EMP ProtectionCOperating TemperatureCOperating HumidityCCertificationsCCertificationsCCertificationsCCertificationsCCertificationsCConterportS to S50 NoncondensingCertificationsCCertifications </td <td>Supported Voltage Range</td> <td></td> <td>24V ± 10%</td>	Supported Voltage Range		24V ± 10%		
Networking Interface(1) 10/100/1000 Ethernet PortProcessor SpecsIMPS 74KcMemoryIMPS 74KcMemory64 MB DDR2LEDsProcessor SpecsChannel SizesPtP Mode10/20/30/40/50/608 0MHzPtMP ModeIntroductor CharacteristicsIntroductor Specs (SGCC 0.6T) / Plastic: PCMountingIntroductor Specs (SGCC 0.6T) / Plastic: PCWind LoadingIntroductor Specs (SGCC 0.6T) / Plastic: PCWind SurvivabilityIntroductor Specs (SGCC 0.6T) / Plastic: PCSpectring TemperatureIntroductor Specs (SGCC 0.6T) / Plastic: PCOperating TemperatureIntroductor Specs (SGCC 0.6T) / Plastic: PCOperating TemperatureIntroductor Specs (SGCC 0.6T) / Plastic: PCOperating TemperatureInterface (SGCC 0.6T	Gain		23 dBi		
Processor SpecsMIPS 74KcMemoryGLEDsFChannel SizesPPP ModePhotogeoPtMP Mode10/20/30/40/50/60/80 MHz10/20/30/40 MHzEnclosure CharacteristicsGMountingFVind LoadingSWind SurvivabilityGESD/EMP ProtectionSOperating TemperatureGOperating HumiditySGettificationsSCettificationsSCettificationsSCettificationsSSS <tr< td=""><td>Networking Interface</td><td></td><td>(1) 10/100/1000 Ethernet Port</td></tr<>	Networking Interface		(1) 10/100/1000 Ethernet Port		
Memory 64 MB DDR2 LEDs Ferder Channel Sizes PtP Mode 10/20/30/40/50/60/80 MHz 10/20/30/40 MHz Enclosure Characteristics Image: Comparison of the state of th	Processor Specs		MIPS 74Kc		
LEDs Power, Ethernet Channel Sizes PTP Mode PtMP Mode PtMP Mode Ind/20/30/40/50/60/80 MHz Ind/20/30/40/50/50/F Ind/20/50/F Ind/20/5	Memory		64 MB DDR2		
Channel Sizes PtP Mode PtMP Mode 10/20/30/40/50/60/80 MHz 10/20/30/40 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 - - - Operating Humidity - 5 to 95% Noncondensing Certifications - CE, FCC, IC -	LEDs		Power, Ethernet		
Ind/20/30/40/50/60/80 MHzInd/20/30/40 MHzEnclosure CharacteristicsReflector (SGCC 0.6T) / Plastic: PCMountingPole-Mounting Kit (Included)Wind LoadingIndext 275 N @ 200 km/h (61.8 lbf @ 125 mph)Wind SurvivabilityIndext Indext 200 km/h (61.8 lbf @ 125 mph)ESD/EMP ProtectionIndext Indext 200 km/h (61.8 lbf @ 125 mph)Operating TemperatureIndext Indext 200 km/h (61.8 lbf @ 125 mph)Operating HumidityIndext Indext 200 km/h (61.8 lbf @ 125 mph)CertificationsIndext Indext 200 km/h (61.8 lbf @ 125 mph)	Channel Sizes	PtP Mode PtMP Mode			
Enclosure CharacteristicsReflector (SGCC 0.6T) / Plastic: PCMountingPole-Mounting Kit (Included)Wind Loading275 N @ 200 km/h (61.8 lbf @ 12.5 mph)Wind SurvivabilityContent of the state		10/20/30/40/50/60/80 MHz	10/20/30/40 MHz		
MountingPole-Mounting Kit (Included)Wind LoadingCTS N@ 200 km/h (61.8 lbf @ 125 mph)Wind SurvivabilityCOD km/h (125 mph)ESD/EMP ProtectionCOD km/h (125 mph)Operating TemperatureCOD km/h (126 mph)Operating HumidityCOD km/h (126 mph)CertificationsCE, FCC, IC	Enclosure Characteristics		Reflector (SGCC 0.6T) / Plastic: PC		
Wind Loading275 N@ 200 km/h (61.8 lbf @ 125 mph)Wind Survivability200 km/h (125 mph)ESD/EMP Protection± 24 kV Contact / AirOperating Temperature-40 to 70° C (-40 to 158° F)Operating Humidity5 to 95% NoncondensingCertificationsCE, FCC, IC	Mounting		Pole-Mounting Kit (Included)		
Wind Survivability200 km/h (125 mph)ESD/EMP Protection± 24 kV Contact / AirOperating Temperature-40 to 70° C (-40 to 158° F)Operating Humidity5 to 95% NoncondensingCertificationsCE, FCC, IC	Wind Loading		275 N @ 200 km/h (61.8 lbf @ 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	Wind Survivability		200 km/h (125 mph)		
Operating Temperature -40 to 70° C (-40 to 158° F) Operating Humidity 5 to 95% Noncondensing Certifications CE, FCC, IC	ESD/EMP Protection		± 24 kV Contact / Air		
Operating Humidity 5 to 95% Noncondensing Certifications CEF, FCC, IC	Operating Temperature		-40 to 70° C (-40 to 158° F)		
Certifications CE, FCC, IC	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
	1x BPSK (1/2)	25 dBm	± 2 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
airMAX ac	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 (¾)	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 (%)	-74 dBm	± 2 dB
	8x 256QAM (¾)	21 dBm	± 2 dB		8x 256QAM (¾)	-69 dBm	± 2 dB
	8x 256QAM (%)	21 dBm	± 2 dB		8x 256QAM (%)	-65 dBm	± 2 dB

LiteBeam 🕰 GENZ

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: www.ubnt.com/support/warranty ©2018 Ubiquiti Networks, Inc. All rights reserved. Ubiquiti, Ubiquiti Networks, the Ubiquiti U logo, the Ubiquiti beam logo, airMAX, airOS, airMagic, InnerFeed, LiteBeam, and UNMS 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. LiteBeam[®] AG GENZ

DATASHEET







Horizontal Azimuth









www.ubnt.com