LTU™ Lite

DATASHEET



5 GHz PtMP LTU™ Client Radio

Proprietary Ubiquiti® LTU Processor

13 dBi Integrated Antenna

10/20/30/40/50 MHz Channel Width Flexibility

Model: LTU-Lite

Overview

Featuring an integrated antenna, the LTU Lite is a compact, cost-effective subscriber station utilizing the 5 GHz radio band. It functions as a CPE (Customer Premises Equipment) in a Point-to-MultiPoint (PtMP) environment with the LTU Rocket® as the basestation.

Proprietary LTU Technology

Based on Ubiquiti's LTU technology, the LTU Lite is not impeded by the limitations of standard 802.11 Wi-Fi technology. Its custom LTU silicon and radio architecture provide up to 600+ Mbps[1] of real TCP/IP throughput and modulation rates of up to 4096QAM[2].

CPE Modes

The LTU Lite supports both bridged and built-in hardware NAT router modes to suit your specific deployment.

Frequency Split

The LTU Lite can use different frequencies for TX and RX to avoid interference.

[1] *1+ Gbps with future firmware upgrade.*

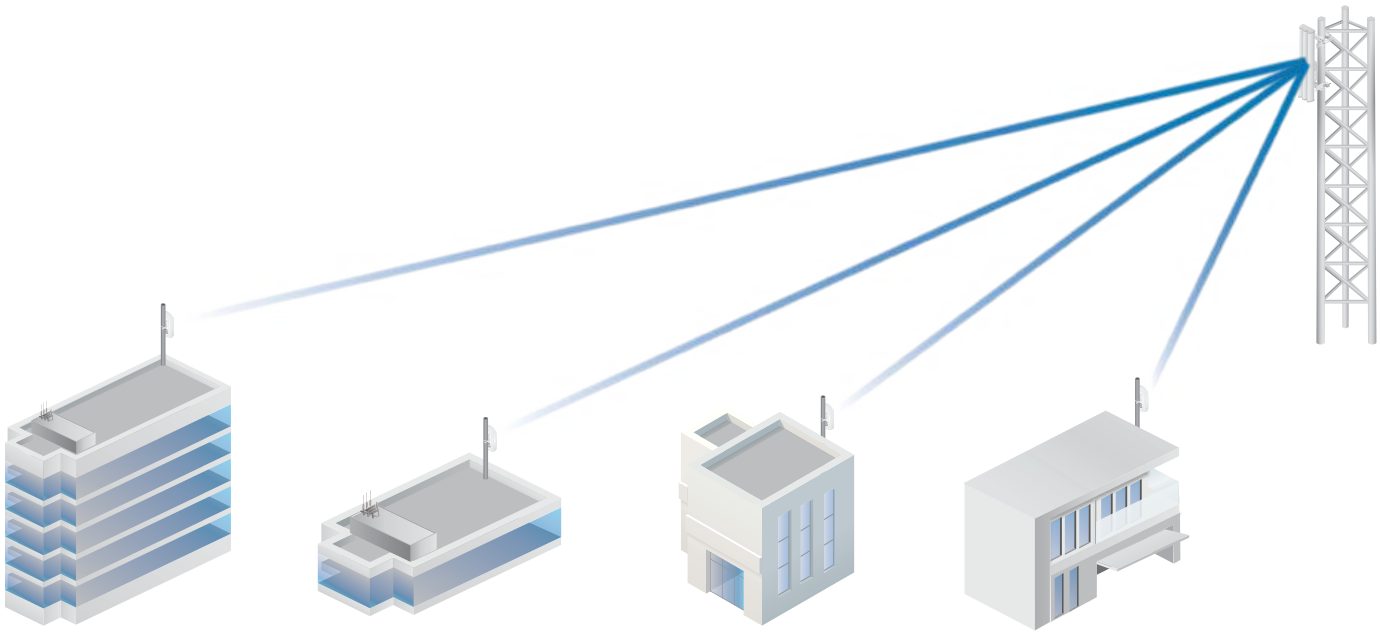
[2] *Available with future firmware upgrade.*



Convenient Mount Options

The LTU Lite is designed for quick yet reliable mounting on a pole or on a wall. All necessary mounting hardware is included.

Deployment Example



In a PtMP link, the LTU Lite functions as CPEs to the LTU Rocket, which is paired with an airMAX® sector antenna.

Channel Width Flexibility

Channel width flexibility allows independent TX and RX channel frequency configurations anywhere within the radio band to avoid local interference. Channel width options include:

- 10 MHz
- 20 MHz
- 30 Mhz
- 40 MHz
- 50 MHz
- Up to 100 MHz*

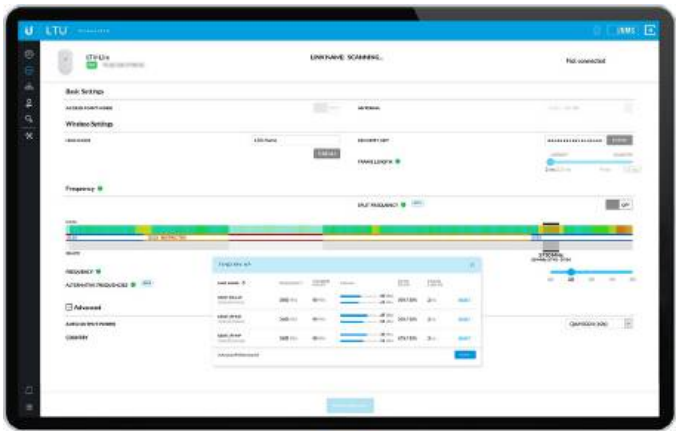


Auto Power Adjustments

By default, the Auto Output Power option allows the LTU Lite to set the output power (EIRP) to the appropriate level.

Signal Control

The LTU Lite's TX output power is controlled by the AP's target TX output power. A PtMP network can manage signal levels to enhance network stability and achieve optimal wireless performance with the highest possible modulation.



Convenient Configuration

To manage the LTU Lite, you have two options: the LTU Configuration Interface and Ubiquiti Network Management System (UNMS™). Either option lets you manually configure the LTU Lite.

Within the LTU Configuration Interface, you can manually configure the LTU Lite or manage it from the AP side using the Find My AP feature. The LTU Lite will automatically scan for APs using the same channel bandwidth. Select the appropriate AP and then use it to configure the LTU Lite.

* *Available with future firmware upgrade.*







LTU Configuration Interface

PtMP Dashboard

The Dashboard offers map and Fresnel views* so you can visualize the network. The map view shows your PtMP links overlaid on a geographic map, while the Fresnel view shows the link calculated for your selected CPE, including line of sight, first Fresnel zone, and 60% clearance zone.



New graphs provide instant status updates and help you to detect connectivity issues and their effects on PtMP performance:

- The airtime distribution bar graph displays in real time how much airtime each CPE is using. Click any point to view the airtime and link score for a specific CPE.

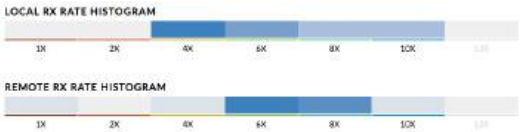


- The AP RF environment bar graph shows ambient RF noise levels across the frequency spectrum.
- The combined remote RF environment bar graph also shows ambient RF noise levels but for the combined environment of all of the remote CPEs.



* *Available for models equipped with GPS.*

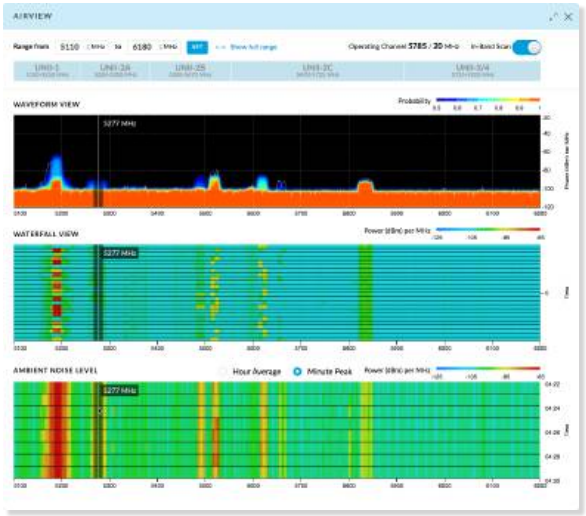
- The local and remote RX rate histograms show the receive modulation rates of the various CPEs.



Real-Time Spectral Analysis

airView® spectral analysis runs on a dedicated and independent receiver, which has excellent EVM (Error Vector Magnitude) performance.

The receiver can also perform other tasks, such as a search for channel occupancy, DFS detection, and automatic channel/frequency assignment. Calibration (signal level measurement accuracy) and resolution bandwidth options are enhanced. Spectral zoom (user-defined scan limits) is also available.



LTU-Lite	
Dimensions	153 x 84 x 39.5 mm (6.02 x 3.31 x 1.56")
Weight	250 g (8.82 oz)
Networking Interface	(1) 10/100/1000 Ethernet Port
Enclosure	Outdoor UV Stabilized Plastic
Max. Power Consumption	8.5W
Power Supply	24V, 0.5A Gigabit PoE Adapter (Included)
Power Method	24V Passive PoE (Pairs 4, 5+; 7, 8-)
Voltage Range	22 - 26V
Max. Conducted TX Power	22 dBm per Chain
Gain	13 dBi
Cross-pol Isolation	20 dB Minimum
Max. VSWR	1.8:1
Beamwidth	45° (H-pol) / 45° (V-pol) / 45° (Elevation)
Polarization	Dual Linear
Mounting	Pole-Mount Wall Mount (Kit Included)
Wind Loading	20 N @ 200 km/h (4.5 lbf @ 125 mph)
Wind Survivability	200 km/h (125 mph)
ESD/EMP Protection	± 24kV Contact/Air
Operating Temperature	-40 to 55° C (-40 to 131° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC

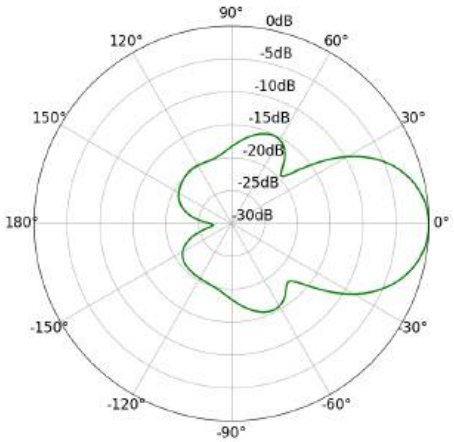
Operating Frequency (MHz)	
Worldwide	4800 - 6200*
US/CA U-NII-1 U-NII-2A U-NII-2C U-NII-3	 5150 - 5250 5250 - 5350 5470 - 5725 5725 - 5850

** Depends on regulatory region.*

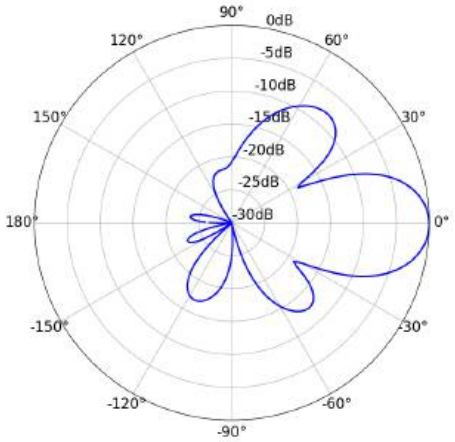
Bluetooth LE Management Radio (MHz)	
Worldwide	2400 - 2483.5



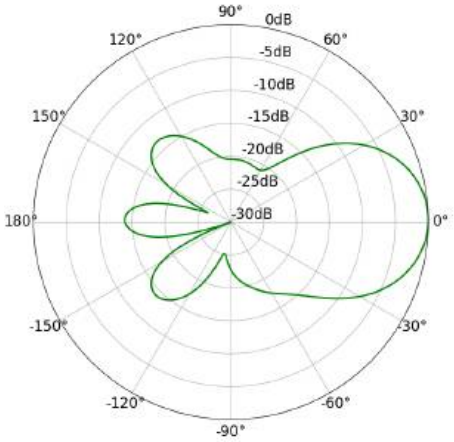
Vertical Azimuth



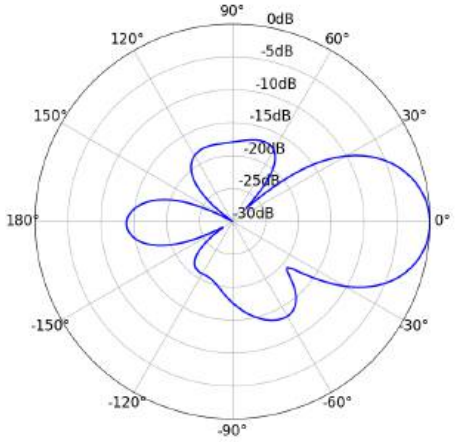
Vertical Elevation



Horizontal Azimuth



Horizontal Elevation



Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: ui.com/support/warranty
The limited warranty requires the use of arbitration to resolve disputes on an individual basis, and, where applicable, specify arbitration instead of jury trials or class actions.
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