

Ubiquiti LiteAP Sector

The confusingly named LiteAP (LAP-120) is a very good, cheap 120' sector antenna. 120' means you need three to get a full 360'. It used to be called a LiteBeam 5AC AP LBE-5AC-16-120, and is still named that on parts of their website.

We use it as a sector antenna for most hub and supernode installs. As with all Ubiquiti gear you need to flash it with the latest firmware first.

The AC in the name is not 802.11ac, it is Ubiquiti's own "AirMax" protocol. These devices can only connect to other Ubiquiti "AirMax" devices like LiteBeams, NanoBeams, PowerBeams etc.

Ubiquiti LiteAP type unknown

Device specs are available at ubnt.com.

Configuration Instructions:

LiteAP 120 sector standard configuration

Connect to the LiteAP GUI. Upgrade the firmware to the version recommended on [Ubiquiti Firmware](#).

The default IP of a factory reset unit is <https://192.168.1.20/>. Username: ubnt Password: ubnt

In Wireless set the following settings:

- Wireless mode to **Access Point PtMP airmax AC**
- SSID "nycmesh-xxxx-direction" (for exemple: nycmesh-1635-east)
- channel width 40 Mhz
- Control Freq. ON
 - Select all freq. and uncheck from 5565 to 5705 (5565 and 5705 included), as well as some other assorted frequencies.

- Just paste in the following, rather than doing manual checkbox selection:

```
5220, 5225, 5230, 5240, 5260, 5265, 5270, 5275, 5280, 5285, 5290, 5295, 5300, 5305, 5310, 5315, 5320, 5325, 5330, 5485, 5490, 5500, 5505, 5510, 5515, 5520, 5525, 5530, 5535, 5540, 5545, 5550, 5555, 5560, 5710, 5740, 5745, 5750, 5755, 5760, 5765, 5770, 5775, 5780, 5785, 5790, 5795, 5800, 5805, 5810, 5815, 5820, 5825, 5830, 5835
```

-

(This is **extremely important**. Due to FCC regulations in NY, we need to make sure to not use any channel overlapping 5590 - 5677)

- choose a center frequency that's different than other antennas in the area or on the same hub. (sector, litebeam, powerbeam, etc ...)
- Wireless Security: WPA security personal / Preshared key: nycmeshnet
- TDD framing: Flexible (or Flexible (new) depending on firmware)
- ReSE ON

In the advanced wireless settings:

- Isolation ON
- Automatic Power Control (APC) should be enabled if available and set to Reliable (Minimal and Maximum are the other options). This setting may only be available in newer firmwares (8.7.13 from 2024 for example, but not 8.5.12 from 2019)

In Network set:

- DHCP and fallback IP 192.168.1.20
- IPV6 off

In Services:

- Add UNMS key (and adopt in UISP)
 - Requires you to have a UISP account with edit access (not nycmesh_readonly). Reach out on slack if you need help with this.
- Device Discovery: CDP on

In System set:

- Device name: same as SSID
- Turn NTP server ON
- Set the time zone
- Set the password per the mesh password policy
- Add the Location GPS coordinates and height (say 40.6395036143773 latitude, -73.99629943908782 longitude, 60ft height)

Revision #5

Created 9 December 2023 04:39:32 by Willard Nilges

Updated 9 October 2024 18:15:06 by johnb