Ubiquiti NanoStation Nsm5- Flash Notes

We have been moving towards MikroTik OmniTik as our mesh device. Before using a NanoStation, you should check with us that you are in range of another NanoStation. Some use the NanoStation when they are out of range of the mesh network using the built-in tinc vpn connection.

Don't forget to read our FAQ on the main site.

Also, please fill out the Join form.

When finished, read how to install a NanoStation outdoors

Order a router

- Ubiquiti NSM5 directional 5GHz (~$90 including tax)

For Supernode connections you need a different router (usually LiteBeamAC)

Buy on Amazon:

Ubiquiti NanoStation NSM5

Buy at B&H: (free delivery)

Ubiquiti NanoStation NSM5

Download the firmware and flash your router

NanoStation NSM5 instructions
(for old NSM5s or if you are upgrading see below)

FOLLOW ALL THE STEPS OR YOU MAY PERMANENTLY BRICK THE ROUTER!

- For a new NSM5, download this file to your computer- AirOS5.5 download **You MUST downgrade from AirOS 5.6 to 5.5**
- Plug an ethernet cable from POE on the power adapter to "main" on the NSM5 (we will switch to "secondary" later)
- Plug from LAN on the adapter to your computer (You may need a USB ethernet adapter)

- Turn off Wi-Fi on your computer
- Open Network Prefs (or equivalent)
- Connect by ethernet using a manual address e.g. 192.168.1.11 with mask 255.255.255.0

- Go to 192.168.1.20 in your browser
- You will get https warning "your connection is not private" or some such
- Click "advanced" and "proceed to 192.168.1.20"
- Enter ubnt, ubnt, USA, [x] agree to terms, login
- On the tabbed panel select "System"
- Click "Upload Firmware: Choose File"
- Select the AirOS file
- Click "Upload"
- There are two loading screens here, and if you don't go through both, you will irreparably break the router.
- Wait until it reboots
- Make sure you are now running 5.5.10 and NOT 5.6.x. Seriously. Read this. Double check. Triple check. If not, you'll break the router.

- Download our firmware- NSM5 XW download

- Go to 192.168.1.20, login and select "System" again
- Click "Upload Firmware: Choose File"
- Select the M5-XW factory image you downloaded
- Click "Upload"
- You will get a "third-party" warning. Ignore this and click "Update"

Wait ten minutes or so. It now has a SSID name like "nycmesh 1a2b" and a random IP of the form 10.x.x.x

- Plug an ethernet cable from LAN on your current router to LAN on the power supply, and from POE to the **secondary** input on the NanoStation.
- Email us and we will check that everything is working and add you to the mesh. You must do this as we manually configure the tinc tunneling for each newly flashed router.

You must also install a watchdog script to keep the network stable. Here are the instructions. Email us if you are not comfortable doing this. This script will be included in the next version of our firmware.

You're done! Now your router is flashed, read how to install a NanoStation

Upgrades
Upgrades are for when your router is already running nycmesh/qMp or another version of OpenWrt.

WR842N upgrade download

WDR3600 upgrade download

NSM5-XW upgrade download

Older (2014 or earlier) XM NSM5s

[NSM5-XM download](#)

[NSM5-XM upgrade download](#)

Firmware

[Our firmware](#) is based on [qMp](#), which is an [OpenWrt](#) package using [BMX6](#) meshing protocol. Thanks to Roger at qMp for all of his help.

Am I on the mesh?

After you successfully flash your router and you have emailed us, and we have added your tinc tunneling key, you should be on the mesh. If you re-flash your router (not usually necessary) you will have to email us again so we can add your new tinc tunneling key. Emailing us also lets us know who's router was just flashed.

A quick test to see if you are on the mesh is to go here- http://10.100.4.10/

This URL should resolve after an hour or so of being online-

http://wiki.mesh/

Here are our old TP-Link instructions in case you find an old TL-WR842N on ebay-

TP-Link instructions

- Click to download the firmware to your computer-

  [TL-WR842N download](#) (For upgrades see above)
- Connect to the router via Wi-Fi. It has a name like "TP-LINK_ABC123"
- Enter the "wireless password/pin" that is printed on the bottom of the router e.g. "12341234"
- In your browser, go to 192.168.0.1
- Enter name: admin, pwd: admin
- Click System Tools>Firmware upgrade
- Click "choose file" and select the image you downloaded and click "upgrade"

Wait ten minutes or so and connect to the router via Wi-Fi. It now has a SSID name like "nycmesh 1a2b" and a random IP of the form 10.x.x.x

- Plug an ethernet cable from LAN on your current router to the blue WAN on the TP-Link.
- Email us and we will check that everything is working.