



NanoStation M NanoStation locoM

High-Power 2x2 MIMO
airMAX® TDMA Station
Models: NSM2/NSM3/NSM365/
NSM5/locoM2/locoM5

QUICK START GUIDE

Introduction

Thank you for purchasing the Ubiquiti® NanoStation®. This Quick Start Guide is designed to guide you through installation and also includes warranty terms.

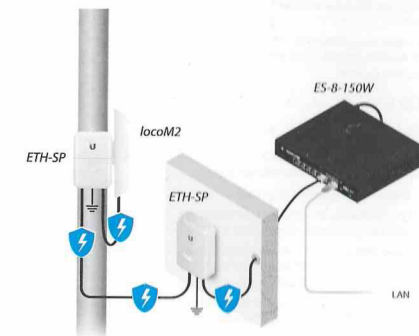
Package Contents



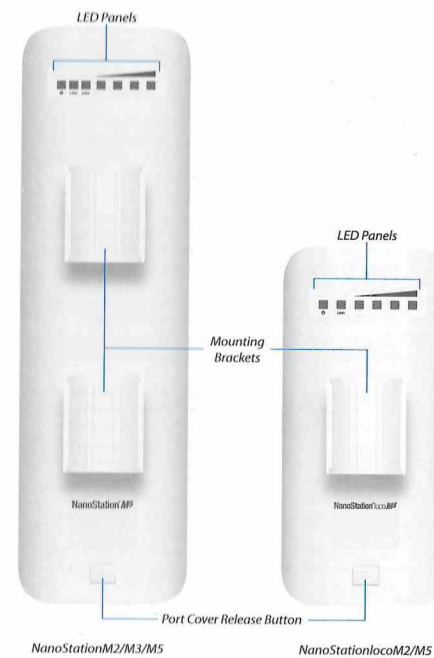
Installation Requirements

- Shielded Category 5 (or above) cabling with drain wire should be used for all wired Ethernet connections and should be grounded through the AC ground of the PoE. We recommend that you protect your networks from harmful outdoor environments and destructive ESD events with industrial-grade, shielded Ethernet cable from Ubiquiti. For more details, visit ui.com/toughcable
- Surge protection should be used for all outdoor installations. We recommend that you use two Ethernet Surge Protectors, model ETH-SP, one near the NanoStation and the other at the entry point to the building. The ETH-SP will absorb power surges and safely discharge them into the ground.

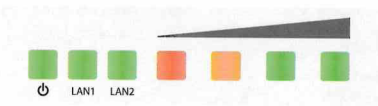
Hardware Overview



Back View

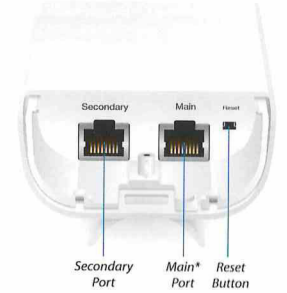


LED Panel



- Power** The Power LED will light green when the device is connected to a power source.
- LAN1 Main Ethernet** The LED will light steady green when an active Ethernet connection is made to the Main/LAN port and flash when there is activity.
- LAN2 Secondary Ethernet** (NanoStation M2/M3/M5 only) The LED will light steady green when an active Ethernet connection is made to the Secondary port and flash when there is activity.
- Signal** In airOS®, you can modify the wireless signal strength threshold values for each LED on the *Advanced* tab under *Signal LED Thresholds*. The default values are shown below:
 - LED will light red when the wireless signal strength is above -94 dBm.
 - LED will light amber when the wireless signal strength is above -80 dBm.
 - LED will light green when the wireless signal strength is above -73 dBm.
 - LED will light green when the wireless signal strength is above -65 dBm.

Ports



Main/LAN 10/100 Ethernet port used to connect the power and should be connected to the LAN and DHCP server.

Secondary (NanoStation M2/M3/M5 only) 10/100 Ethernet port used for bridging and supports software-configurable PoE passthrough.

Note: In order to use PoE passthrough on the Secondary port, a 24V, 1A PoE adapter is required.

Reset Button To reset to factory defaults, press and hold the Reset button for more than 10 seconds while the NanoStation is powered on. Alternatively, a remote reset button is located on the bottom of the PoE Adapter.

* Main is labeled LAN on the NanoStation locoM2/M5.



Hardware Installation

- Press the **Port Cover Release Button** located on the back of the NanoStation and slide the cover off.



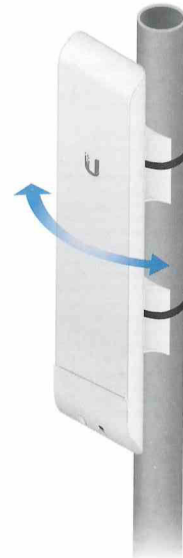
- Connect an Ethernet cable to the **Main/LAN** port.



- Replace the port cover.
- Position the NanoStation at the desired location on a pole and insert a **Cable Tie** into the slot of the **Mounting Bracket**.



- Align the front of the NanoStation toward the other end of the wireless link. Then tighten the **Cable Tie** around the pole.



Note: For the NanoStation M2/M3/M5, two **Cable Ties** are provided. Fasten the second **Cable Tie** to the other mounting bracket for added security.

Connecting Power

Connect the power using one of the following options:

- Using the included **Gigabit PoE Adapter**: Go to *Connecting to the PoE Adapter*.
- Using a separate PoE switch: Connect the Ethernet cable from the device's **Ethernet** port to a PoE-enabled Ethernet port on the switch.

WARNING: The switch port must comply with the power specifications listed in the *Specifications* section of this Quick Start Guide.

Connecting to the PoE Adapter

- Connect the Ethernet cable from the device to the **POE** port of the **PoE Adapter**.
- Connect an Ethernet cable from your LAN to the **LAN** port of the **PoE Adapter**.
- Connect the **Power Cord** to the adapter's power port. Connect the other end of the **Power Cord** to a power outlet.



Mounting the PoE Adapter (Optional)

- Remove the **PoE Mounting Bracket** from the adapter, place the bracket at the desired location, and mark the two holes.
- Pre-drill the holes if necessary, and secure the bracket using two fasteners (not included).
- Align the adapter's slots with the tabs of the **PoE Mounting Bracket**, and then slide the adapter down.



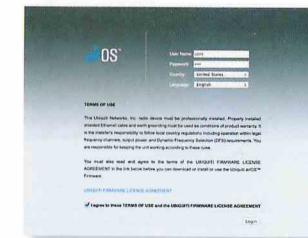
Accessing airOS

Connect to the airOS Configuration Interface.

- Make sure that your host system is connected via Ethernet to the NanoStation.
- Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet.
- Launch your web browser. Type **https://192.168.1.20** in the address field. Press **enter** (PC) or **return** (Mac).



- The login screen will appear. Enter **ubnt** in the **Username** and **Password** fields. Select your **Country** and **Language**. You must agree to the **Terms of Use** to use the product. Click **Login**.



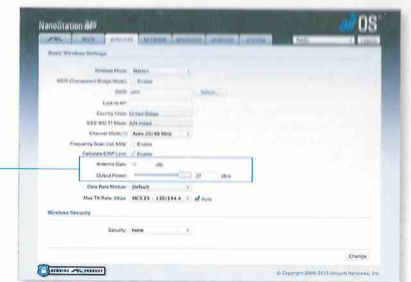
Note: The **Country** setting for U.S. product versions is restricted to a choice of Canada, Puerto Rico, or the U.S. to ensure compliance with FCC/IC regulations.

The airOS Configuration Interface will appear, allowing you to customize your settings as needed. For additional details on the airOS Configuration Interface, refer to the User Guide available at ui.com/download/airmax

You can also manage your device using the Ubiquiti Network Management System. Setup using the UNMS™ app requires the U-Installer, sold separately.

Installer Compliance Responsibility

Devices must be professionally installed and it is the professional installer's responsibility to make sure the device is operated within local country regulatory requirements.



The **Antenna Gain** and **Output Power** fields are provided to the professional installer to assist in meeting regulatory requirements.

Specifications

NanoStationM2/M3/M365/M5	
Dimensions	294 x 30 x 80 mm (11.57 x 1.18 x 3.15")
Weight	
NSM2/NSM5	0.4 kg (14.11 oz)
NSM3/NSM365	0.5 kg (17.64 oz)
Gain	
NSM2	11 dBi
NSM3/NSM365	13.7 dBi
NSM5	16 dBi
Max. Power Consumption	8W
Power Supply	24V, 0.5A PoE Adapter (Included)
Power Method	Passive PoE (Pairs 4, 5+; 7, 8 Return)
Mounting	Pole-Mounting Kit Included
Networking Interface	(2) 10/100 Ethernet Ports
Operating Temperature	-30 to 75° C (-22 to 167° F)
Operating Humidity	5 to 95% Noncondensing

NSM2/NSM3/NSM365 Operating Frequency (MHz)	
NSM2	2412 - 2462
NSM3	3400 - 3700
NSM365	3650 - 3675

NSM5 Operating Frequency (MHz)				
Worldwide				5150 - 5875
EU		5150 - 5350, 5470 - 5725, 5725 - 5875		
USA	U-NII-1	U-NII-2A	U-NII-2C	U-NII-3
	5150 - 5250	5250 - 5350	5470 - 5725	5725 - 5850
IC		5470 - 5600, 5650 - 5725, 5725 - 5850		

RoHS/WEEE Compliance Statement



English

European Directive 2012/19/EU requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

Deutsch

Die Europäische Richtlinie 2012/19/EU verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist, nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Haushaltsmüll getrennt entsorgt werden sollte. Es liegt in Ihrer Verantwortung, dieses Gerät und andere elektrische und elektronische Geräte über die dafür zuständigen und von der Regierung oder örtlichen Behörden dazu bestimmten Sammelstellen zu entsorgen. Ordnungsgemäßes Entsorgen und Recyceln trägt dazu bei, potentielle negative Folgen für Umwelt und die menschliche Gesundheit zu vermeiden. Wenn Sie weitere Informationen zur Entsorgung Ihrer Altgeräte benötigen, wenden Sie sich bitte an die örtlichen Behörden oder städtischen Entsorgungsdienste oder an den Händler, bei dem Sie das Produkt erworben haben.

NanoStationlocoM2/M5	
Dimensions	163 x 31 x 80 mm (6.42 x 1.22 x 3.15")
Weight	0.18 kg (6.35 oz)
Operating Frequency	
locoM2	2412 - 2462 MHz
locoM5	Worldwide: 5170 - 5875 MHz USA: 5725 - 5850 MHz
Gain	
locoM2	8 dBi
locoM5	13 dBi
Max. Power Consumption	5.5W
Power Supply	24V, 0.5A PoE Adapter (Included)
Power Method	Passive PoE (Pairs 4, 5+; 7, 8 Return)
Mounting	Pole-Mounting Kit Included
Networking Interface	(1) 10/100 Ethernet Port
Operating Temperature	-30 to 75° C (-22 to 167° F)
Operating Humidity	5 to 95% Noncondensing

locoM2 Operating Frequency (MHz)	
locoM2	2412 - 2462

locoM5 Operating Frequency (MHz)				
Worldwide				5150 - 5875
EU		5150 - 5350, 5470 - 5725, 5725 - 5875		
USA	U-NII-1	U-NII-2A	U-NII-2C	U-NII-3
	5150 - 5250	5250 - 5350	5470 - 5725	5725 - 5850
IC		5470 - 5600, 5650 - 5725, 5725 - 5850		

Safety Notices

- Read, follow, and keep these instructions.
- Heed all warnings.
- Only use attachments/accessories specified by the manufacturer.

WARNING: Do not use this product in a location that can be submerged by water.

WARNING: Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

Electrical Safety Information

- Compliance is required with respect to voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified may result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.
- There are no operator serviceable parts inside this equipment. Service should be provided only by a qualified service technician.
- This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.
 - Do not substitute the power cord with one that is not the provided approved type. Never use an adapter plug to connect to a 2-wire outlet as this will defeat the continuity of the grounding wire.
 - The equipment requires the use of the ground wire as a part of the safety certification, modification or misuse can provide a shock hazard that can result in serious injury or death.
 - Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.
 - Protective earthing is provided by Listed AC adapter. Building installation shall provide appropriate short-circuit backup protection.
 - Protective bonding must be installed in accordance with local national wiring rules and regulations.

Limited Warranty

[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.

Declaration of Conformity

Български [Bulgarian] С настоящото UBIQUITI декларира, че това устройство NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 е в съответствие със съществените изисквания и други приложения разпоредби на Директиви 2014/53/ЕС, 2014/30/ЕО, 2014/35/ЕО. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: [ui.com/compliance](#)

Hrvatski [Croatian] UBIQUITI ovim putem izjavljuje da je ovaj uređaj NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 sukladan osnovnim zahtjevima i ostalim bitnim odredbama Direktiva 2014/53/EU, 2014/30/EU, 2014/35/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: [ui.com/compliance](#)

Čeština [Czech] UBIQUITI tímto prohlašuje, že toto NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 zařízení, je v souladu se základními požadavky a dalšími příslušnými ustanoveními směrnice 2014/53/EU, 2014/30/EU, 2014/35/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: [ui.com/compliance](#)

Dansk [Danish] Hermed, UBIQUITI, erklærer at denne NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 enhed, er i overensstemmelse med de væsentlige krav og øvrige relevante krav i direktiver 2014/53/EU, 2014/30/EU, 2014/35/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: [ui.com/compliance](#)

Nederlands [Dutch] Hierbij verklaart UBIQUITI, dat deze NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 apparaat, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU, 2014/30/EU, 2014/35/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: [ui.com/compliance](#)

English Herby, UBIQUITI, declares that this NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 device, is in compliance with the essential requirements and other relevant provisions of Directives 2014/53/EU, 2014/30/EU, 2014/35/EU. The full text of the EU declaration of conformity is available at the following internet address: [ui.com/compliance](#)

Eesti keel [Estonian] Käesolevaga UBIQUITI kinnitab, et antud NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 seade, on vastavus olulistele nõuetele ja teistele asjakohastele sätelete direktiivide 2014/53/EU, 2014/30/EU, 2014/35/EU. EU vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: [ui.com/compliance](#)

Suomi [Finnish] Täten UBIQUITI vakuuttaa, että tämä NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 laite, on yhdenmukainen olennaisien vaatimusten ja muiden sitä koskevien direktiivien 2014/53/EU, 2014/30/EU, 2014/35/EU. EU-vaatimustenmukaisuusvakuutuksen täysimäinen teksti on saatavilla seuraavassa internetosoitteessa: [ui.com/compliance](#)

Français [French] Par la présente UBIQUITI déclare que l'appareil NSM2/NSM3/NSM365/NSM5/locoM2/locoM5, est conforme aux exigences essentielles et aux autres dispositions pertinentes des directives 2014/53/UE, 2014/30/UE, 2014/35/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: [ui.com/compliance](#)

Deutsch [German] Hiermit erklärt UBIQUITI, dass sich dieses NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 Gerät, in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinien 2014/53/EU, 2014/30/EU, 2014/35/EU befindet. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: [ui.com/compliance](#)

Ελληνικά [Greek] Δια του παρόντος, UBIQUITI, δηλώνει ότι αυτή η συσκευή NSM2/NSM3/NSM365/NSM5/locoM2/locoM5, είναι σε συμμόρφωση με τις βασικές απαιτήσεις και τις λοιπές σχετικές διατάξεις των οδηγιών 2014/53/ΕΕ, 2014/30/ΕΕ, 2014/35/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: [ui.com/compliance](#)

Compliance

FCC

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This radio transmitter FCC ID: SWX-M2N (NSM2), SWX-M2LW (locoM2) SWX-M365N (M365), SWX-M5N (NSM5), or SWX-MSLB (locoM5) has been approved by FCC.

ISED Canada

CAN ICES-3(A)/NMB-3(A)

This device complies with ISED Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device.

This radio transmitter [IC: 6545A-M2N (NSM2), 6545A-M2LW (locoM2) 6545A-M365N (M365), 6545A-MSM3 (NSM3), 6545A-M5N (NSM5), or 6545A-MSLB (locoM5)] has been approved by ISED Canada.

The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

CAN ICES-3(A)/NMB-3(A)

Le présent appareil est conforme aux CNR d'ISDE Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- l'appareil ne doit pas produire de brouillage;
- l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet émetteur radio [IC: 6545A-M2N (NSM2), 6545A-M2LW (locoM2) 6545A-M365N (M365), 6545A-NSM3 (NSM3), 6545A-M5N (NSM5), or 6545A-MSLB (locoM5)] a été approuvée par ISDE Canada.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

IMPORTANT NOTE:

Radiation Exposure Statement:

- This equipment complies with radiation exposure limits set forth for an uncontrolled environment.
- This equipment should be installed and operated with minimum distance 55.53 cm between the radiator & your body.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

AVIS IMPORTANT :

Déclaration sur l'exposition aux rayonnements :

- Cet équipement est conforme aux limites prévues pour l'exposition aux rayonnements dans un environnement non contrôlé.
- Lors de l'installation et de la mise en fonctionnement de l'équipement, assurez-vous qu'il y ait une distance minimale de 55.53 cm entre l'élément rayonnant et vous.
- Cet émetteur ne doit être installé à proximité d'aucune autre antenne ni d'aucun autre émetteur, et ne doit être utilisé conjointement à aucun autre cas antenne.

Australia and New Zealand



Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

Brazil




Nota: Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

CE Marking

CE marking on this product represents the product is in compliance with all directives that are applicable to it.



Country List															
	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	
	IE	IT	LV	LT	LU	MT	NL	PL	PT	RO	SE	SI	SK	UK	

BFWA (Broadband Fixed Wireless Access) members noted in blue



Note: This device meets Max. TX power limit per ETSI regulations.

The following apply to products that operate in the 5 GHz frequency range:



Note: This device is restricted to indoor use only when operating in the 5150 - 5350 MHz frequency range within all member states.



Note: All countries listed may operate at 30 dBm. BFWA member states may operate at 36 dBm.



Note: Operation in the 5.8 GHz frequency band is prohibited in BFWA member states. Other countries listed may use the 5.8 GHz frequency band.

Español [Spanish] Por medio de la presente UBIQUITI declara que este dispositivo NSM2/NSM3/NSM365/NSM5/locoM2/locoM5, cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de las Directivas 2014/53/UE, 2014/30/UE, 2014/35/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: [ui.com/compliance](#)

Svenska [Swedish] Härmed UBIQUITI intygar att denna NSM2/NSM3/NSM365/NSM5/locoM2/locoM5 enhet är i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiven 2014/53/EU, 2014/30/EU, 2014/35/EU. Den fullständiga texten till EU-förklaring om överensstämmelse finns på följande webbadress: [ui.com/compliance](#)

Online Resources

Support [help.ui.com](#)

Community [community.ui.com](#)

Downloads [downloads.ui.com](#)



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