DATASHEET

NanoStation® M
NanoStation® loco M

Indoor/Outdoor airMAX® CPE

Models: NSM2, NSM3, NSM365, NSM5, locoM2, locoM5, locoM9

Cost-Effective, High-Performance

Compact and Versatile Design

Powerful Integrated Antenna

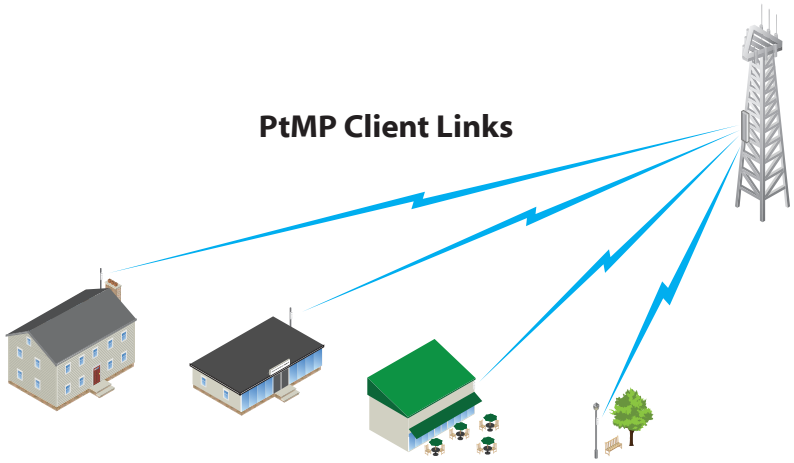
UBIQUITI® NETWORKS

Overview

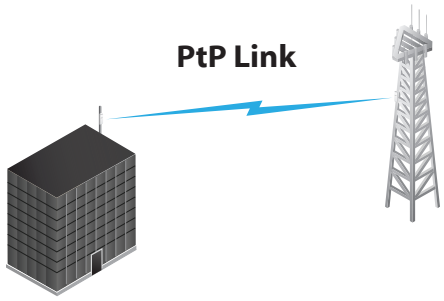
Leading-Edge Industrial Design

Ubiquiti Networks sets the bar for the world's first low-cost and efficient broadband Customer Premises Equipment (CPE) with the original NanoStation®. The NanoStationM and NanoStationlocoM take the same concept to the future with sleek and elegant form factors, along with integrated airMAX® (MIMO TDMA protocol) technology.

The low cost, high performance, and small form factor of NanoStationM and NanoStationlocoM make them extremely versatile and economical to deploy.



NanoStationM used as powerful clients in an airMAX PtMP (Point-to-Multi-Point) network setup.



Use two NanoStationM devices to create a PtP link.

Utilize airMAX Technology

Unlike standard Wi-Fi protocol, Ubiquiti's Time Division Multiple Access (TDMA) airMAX protocol allows each client to send and receive data using pre-designated time slots scheduled by an intelligent AP controller.

This "time slot" method eliminates hidden node collisions and maximizes airtime efficiency. It provides many magnitudes of performance improvements in latency, throughput, and scalability compared to all other outdoor systems in its class.

Intelligent QoS Priority is given to voice/video for seamless streaming.

Scalability High capacity and scalability.

Long Distance Capable of high-speed, carrier-class links.

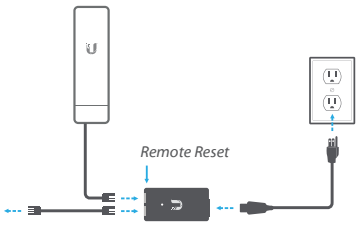
Latency Multiple features dramatically reduce noise.

Dual Ethernet Connectivity[1]

The NanoStationM provides a secondary Ethernet port with software-enabled PoE output for seamless IP video integration.

Intelligent PoE[2]

The remote hardware reset circuitry of the NanoStationM allows the device to be remotely reset from the power supply location.



The NanoStationM may also be powered by the Ubiquiti Networks® EdgeSwitch™. In addition, any NanoStationM can easily become 48V, 802.3af compliant through use of the Ubiquiti® Instant 802.3af Adapter (sold separately).

[1] *Only NanoStationM models*

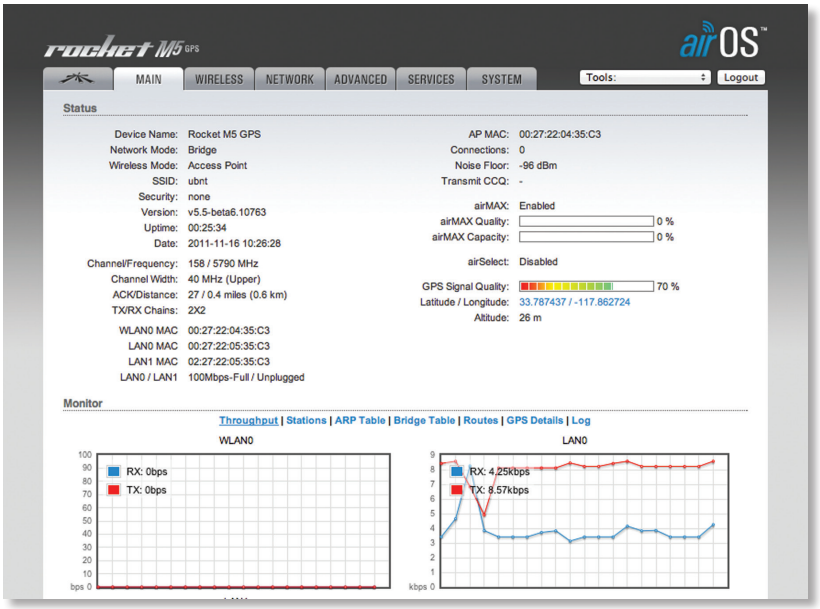
[2] *Remote reset is an option that is sold separately as the POE-24. The NanoStationM includes a 24V PoE adapter without remote reset.*

Software

airOS®

airOS® is an intuitive, versatile, highly developed Ubiquiti firmware technology. It is exceptionally intuitive and was designed to require no training to operate. Behind the user interface is a powerful firmware architecture, which enables high-performance, outdoor multi-point networking.

- Protocol Support
- Ubiquiti Channelization
- Spectral Width Adjustment
- ACK Auto-Timing
- AAP Technology
- Multi-Language Support



airView®

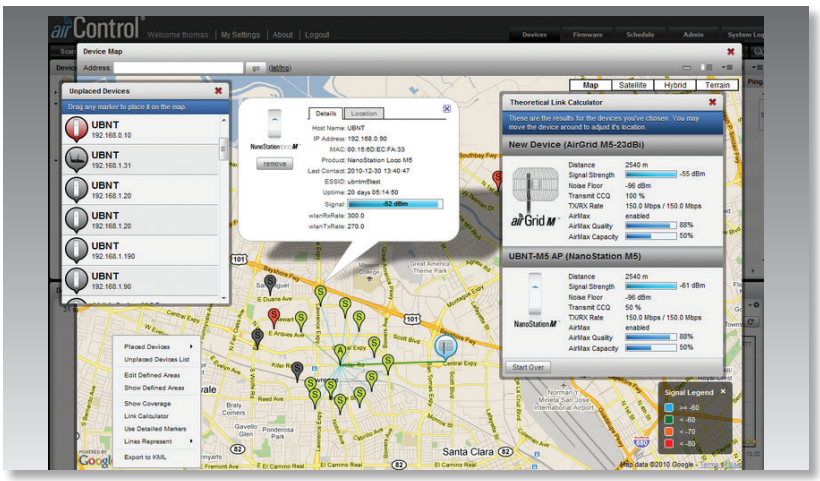
Integrated on all Ubiquiti M products, airView® provides advanced spectrum analyzer functionality: waterfall, waveform, and real-time spectral views allow operators to identify noise signatures and plan their networks to minimize noise interference.

- **Waterfall** Aggregate energy over time for each frequency.
- **Waveform** Aggregate energy collected.
- **Real-time** Energy is shown in real time as a function of frequency.
- **Recording** Automize AirView to record and report results.

airControl®

airControl® is a powerful and intuitive, web-based server network management application, which allows operators to centrally manage entire networks of Ubiquiti devices.

- Network Map
- Monitor Device Status
- Mass Firmware Upgrade
- Web UI Access
- Manage Groups of Devices
- Task Scheduling

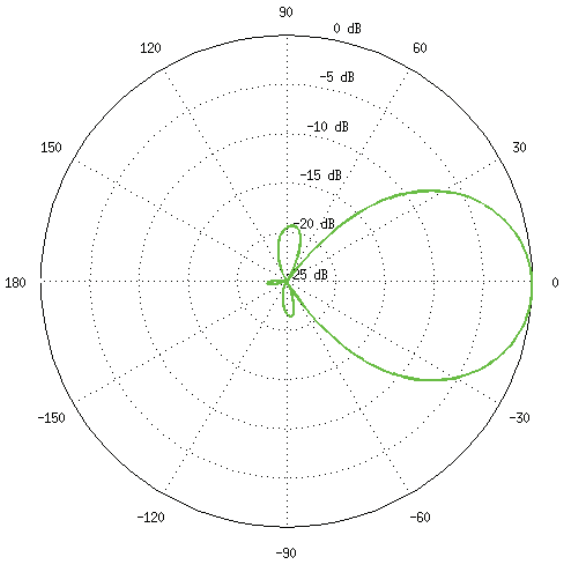


Specifications

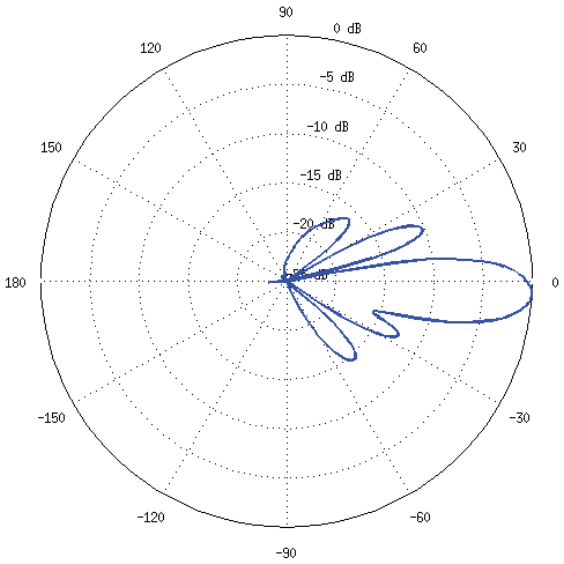
NSM5			
Dimensions	294 x 31 x 80 mm (11.57 x 1.22 x 3.15")		
Weight	400 g (14.11 oz)		
Power Supply (PoE)	24V, 0.5A		
Max. Power Consumption	8W		
Power Method	Passive PoE (Pairs 4, 5+; 7, 8 Return)		
Operating Frequency	Worldwide	USA	USA DFS
	5170-5875 MHz	5725-5850 MHz	5250-5850 MHz
Gain	14.6-16.1 dBi		
Networking Interface	(2) 10/100 Ethernet Ports		
Processor Specs	Atheros MIPS 74Kc, 560 MHz		
Memory	64 MB DDR2, 8 MB Flash		
Frequency	5 GHz		
Cross-pol Isolation	22 dB Minimum		
Max. VSWR	1.6:1		
Beamwidth	43° (H-pol) / 41° (V-pol) / 15° (Elevation)		
Polarization	Dual Linear		
Enclosure	Outdoor UV Stabilized Plastic		
Mounting	Pole-Mount (Kit Included)		
Operating Temperature	-30 to 75° C (-22 to 167° F)		
Operating Humidity	5 to 95% Noncondensing		
Wireless Approvals	FCC Part 15.247, IC RS210, CE		
RoHS Compliance	Yes		
Shock & Vibration	ETSI300-019-1.4		

Output Power: 27 dBm							
5 GHz TX Power Specifications				5 GHz RX Power Specifications			
Modulation	Data Rate/MCS	Avg. TX	Tolerance	Modulation	Data Rate/MCS	Sensitivity	Tolerance
11a	6-24 Mbps	27 dBm	± 2 dB	11a	6-24 Mbps	-94 dBm	± 2 dB
	36 Mbps	25 dBm	± 2 dB		36 Mbps	-80 dBm	± 2 dB
	48 Mbps	23 dBm	± 2 dB		48 Mbps	-77 dBm	± 2 dB
	54 Mbps	22 dBm	± 2 dB		54 Mbps	-75 dBm	± 2 dB
11n/airMAX	MCS0	27 dBm	± 2 dB	11n/airMAX	MCS0	-96 dBm	± 2 dB
	MCS1	27 dBm	± 2 dB		MCS1	-95 dBm	± 2 dB
	MCS2	27 dBm	± 2 dB		MCS2	-92 dBm	± 2 dB
	MCS3	27 dBm	± 2 dB		MCS3	-90 dBm	± 2 dB
	MCS4	26 dBm	± 2 dB		MCS4	-86 dBm	± 2 dB
	MCS5	24 dBm	± 2 dB		MCS5	-83 dBm	± 2 dB
	MCS6	22 dBm	± 2 dB		MCS6	-77 dBm	± 2 dB
	MCS7	21 dBm	± 2 dB		MCS7	-74 dBm	± 2 dB
	MCS8	27 dBm	± 2 dB		MCS8	-95 dBm	± 2 dB
	MCS9	27 dBm	± 2 dB		MCS9	-93 dBm	± 2 dB
	MCS10	27 dBm	± 2 dB		MCS10	-90 dBm	± 2 dB
	MCS11	27 dBm	± 2 dB		MCS11	-87 dBm	± 2 dB
	MCS12	26 dBm	± 2 dB		MCS12	-84 dBm	± 2 dB
	MCS13	24 dBm	± 2 dB		MCS13	-79 dBm	± 2 dB
	MCS14	22 dBm	± 2 dB		MCS14	-78 dBm	± 2 dB
	MCS15	21 dBm	± 2 dB		MCS15	-75 dBm	± 2 dB

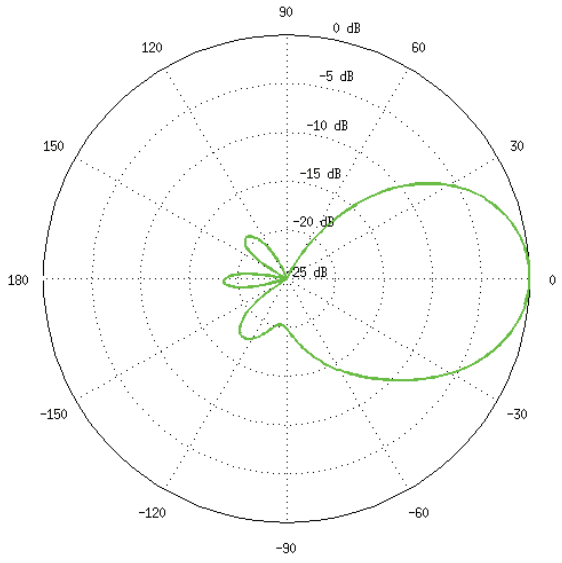
Vertical Azimuth



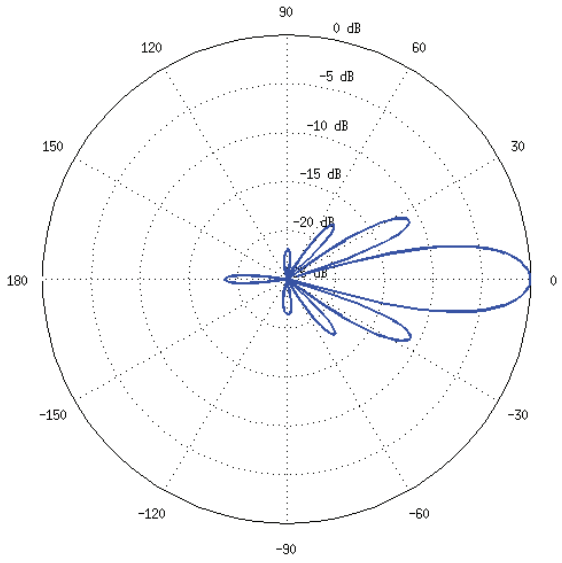
Vertical Elevation



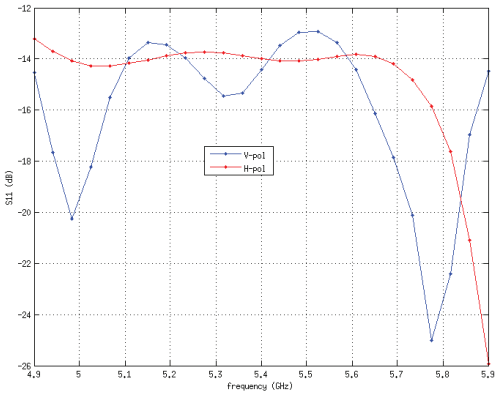
Horizontal Azimuth



Horizontal Elevation



Return Loss



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