NANOSTATIONS GO MESH

LEADING EDGE INDUSTRIAL DESIGN

The original NanoStation set the bar for the world's first low-cost and efficiently designed outdoor broadband CPE. The new NanoStation M takes the same concept to the future with new redesigned sleek and elegant form-factors. The low cost, hi-performance, and small form factor of NanoStation M makes them extremely versatile and ideal in different applications. It provides many magnitudes of performance improvements in latency, throughput, & scalability compared to all other outdoor systems in its class, capable of high speed 50km+ links.

NSM2, NSM5

With a secondary Ethernet port, it has software enabled POE output for seamless IP Video integration. The Remote hardware reset circuitry of NanoStation M allows for device to be reset remotely from power supply location.

POWERFUL MESH FEATURES

Run on OpenWRT, LAviNet mesh software is a highly developed technology. It is very intuitive and easy to operate, which features in:

- Self configuration, self adjustment, self healing
- Intelligent routing and channel assignment
- Proactive and dynamic best path selection
- 24 BSSIDs and VLANs
- Distributed or centralized optimization operation modes
- IEEE 802.11i support (AES, WEP, WPA, WPA2, WPA2 enterprise)
- Service protection – a mesh node without uplink will be prevented from client association
- A web-based control panel that support local or remote configuring/control/upgrading its firmware

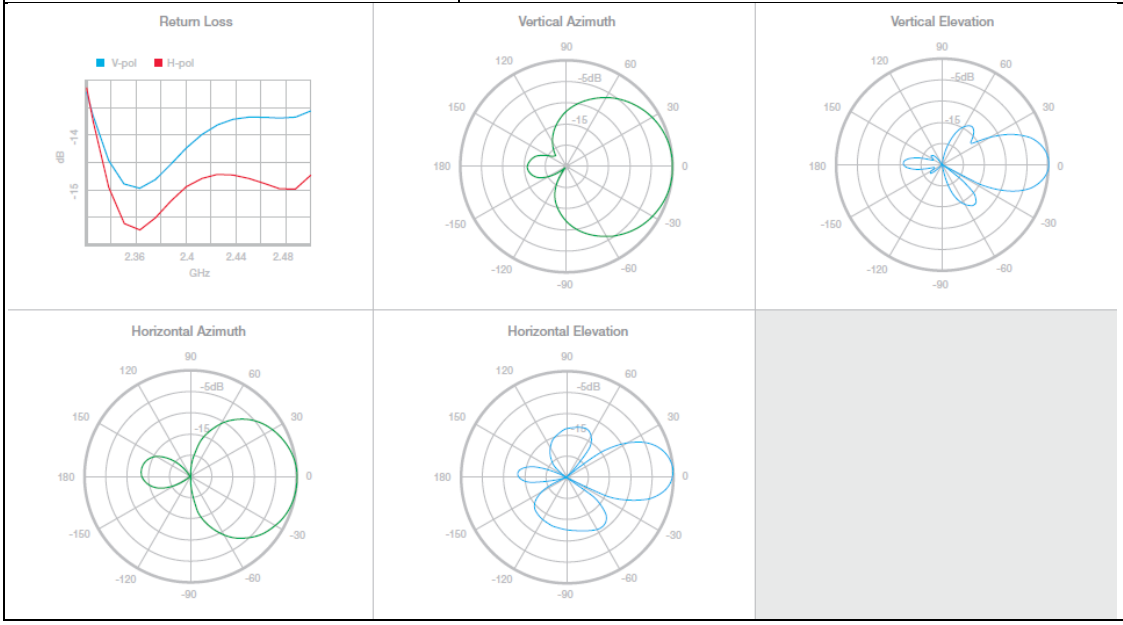
PRODUCT SPECIFICATIONS SUMMARY

System Information		
Processor Specs	Atheros MIPS 24KC, 400MHz	
Memory Information	32MB SDRAM, 8MB Flash	
Networking Interface	2 X 10/100 BASE-TX (Cat. 5, RJ-45) Ethernet	
Regulation / Compliance Information		
Wireless Approvals	FCC Part 15.247, IC RS210, CE	
RoHS Compliance	Yes	
Physical / Electrical / Environmental / Antenna		
Enclosure Characteristics	Outdoor UV Stabilized Plastic	
Mounting Kit	Pole Mounting Kit included	
Power Method	Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)	
Operating Temperature	-30C to 75C	
Operating Humidity	5 to 95% Condensing	
Shock and Vibration	ETSI300-019-1.4	
Dimensions	294x31x80 mm	
Weight	0.4 kg	
Max Power Consumption	8 Watts	
Power Supply (included)	24V, 0.5A POE	
Polarization	Dual Linear	
	M2	M5
Radio Frequency (MHz)	2412-2462	5470-5825
Antenna Gain	11 dBi	16 dBi

SPECIFICATIONS (CONT.) - NSM2

NanoStation M2 - Operating Frequency 2412-2462 MHz							
OUTPUT POWER: 28 dBm							
2.4 GHz TX POWER SPECIFICATIONS					2.4 GHz RX POWER SPECIFICATIONS		
	DataRate	Avg. TX	Tolerance			DataRate	Avg. TX	Tolerance
11b / g	1-24 Mbps	28 dBm	+/- 2 dB		11b / g	1-24 Mbps	-97 dBm min	+/- 2 dB
	36 Mbps	26 dBm	+/- 2 dB			36 Mbps	-80 dBm	+/- 2 dB
	48 Mbps	25 dBm	+/- 2 dB			48 Mbps	-77 dBm	+/- 2 dB
	54 Mbps	24 dBm	+/- 2 dB			54 Mbps	-75 dBm	+/- 2 dB
11n	MCS0	28 dBm	+/- 2 dB		11n	MCS0	-96 dBm	+/- 2 dB
	MCS1	28 dBm	+/- 2 dB			MCS1	-95 dBm	+/- 2 dB
	MCS2	28 dBm	+/- 2 dB			MCS2	-92 dBm	+/- 2 dB
	MCS3	28 dBm	+/- 2 dB			MCS3	-90 dBm	+/- 2 dB
	MCS4	27 dBm	+/- 2 dB			MCS4	-86 dBm	+/- 2 dB
	MCS5	25 dBm	+/- 2 dB			MCS5	-83 dBm	+/- 2 dB
	MCS6	23 dBm	+/- 2 dB			MCS6	-77 dBm	+/- 2 dB
	MCS7	22 dBm	+/- 2 dB			MCS7	-74 dBm	+/- 2 dB
	MCS8	28 dBm	+/- 2 dB			MCS8	-95 dBm	+/- 2 dB
	MCS9	28 dBm	+/- 2 dB			MCS9	-93 dBm	+/- 2 dB
	MCS10	28 dBm	+/- 2 dB			MCS10	-90 dBm	+/- 2 dB
	MCS11	28 dBm	+/- 2 dB			MCS11	-87 dBm	+/- 2 dB
	MCS12	27 dBm	+/- 2 dB			MCS12	-84 dBm	+/- 2 dB
	MCS13	25 dBm	+/- 2 dB			MCS13	-79 dBm	+/- 2 dB
	MCS14	23 dBm	+/- 2 dB			MCS14	-78 dBm	+/- 2 dB
	MCS15	22 dBm	+/- 2 dB			MCS15	-75 dBm	+/- 2 dB

NanoStation M2 - Antenna Information	
Gain	10.4-11.2 dBi
Cross-pol Isolation	23 dB minimum
Max VSWR	1.6:1
Beamwidth	55 deg. (H-pol) / 53 deg (V-pol) / 27 deg (Elevation)



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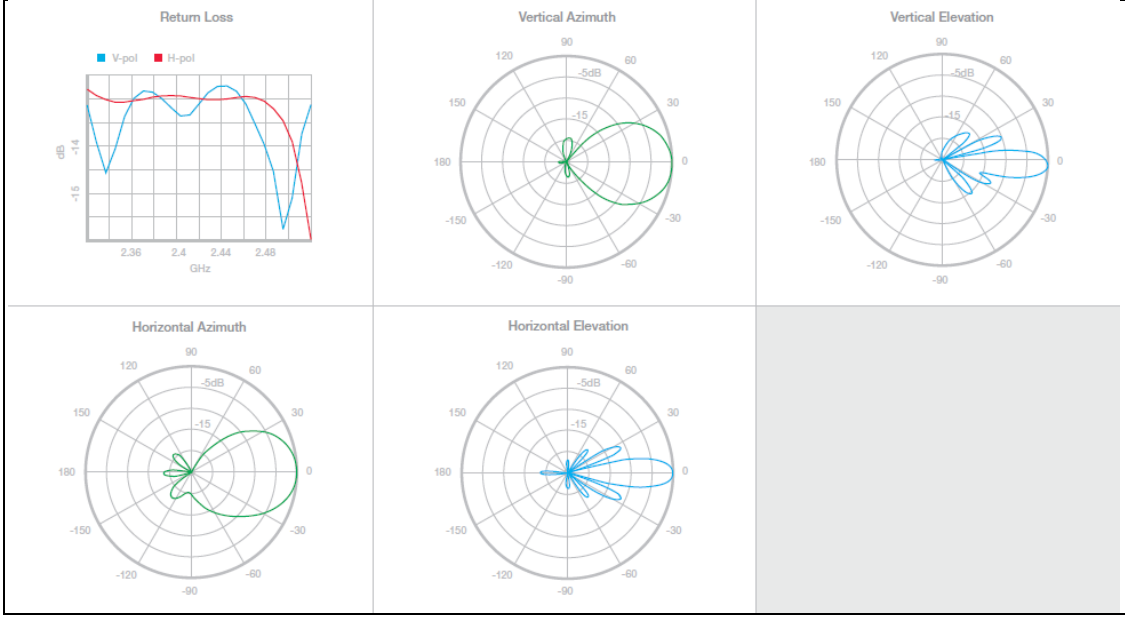
SPECIFICATIONS (CONT.) – NSM5

NanoStation M5 - Operating Frequency 5470-5825 MHz							
OUTPUT POWER: 27 dBm							
5 GHz TX POWER SPECIFICATIONS					5 GHz RX POWER SPECIFICATIONS		
	DataRate	Avg. TX	Tolerance			DataRate	Avg. TX	Tolerance
11b / g	6-24 Mbps	27 dBm	+/- 2 dB		11b / g	6-24 Mbps	-94 dBm min	+/- 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	MCS0	27 dBm	+/- 2 dB		11n	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

NanoStation M5 - Antenna Information	
Gain	14.6 - 16.1 dBi
Cross-pol Isolation	22 dB minimum
Max VSWR	1.6:1
Beamwidth	43 deg. (H-pol) / 41 deg (V-pol) / 15 deg (Elevation)



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