NetPoint Pro n2S5S

A pioneer in Wi-Fi beam forming technology, Netronics Next Generation MIMO xRF Beam forming Wi-Fi Access Points bring the powerful performance of beam forming technology to mass-market deployments.

The NetPoint Pro n2S5S is a carrier-grade sector access point, which leverages the company's Next Generation MIMO xRF Beam forming technology. It delivers true 10x10:3 beam forming, with 10 dual polarity antennas per band and 3 spatial streams. This high performance access point is the ideal solution for operators deploying large-scale 3G/4G data offload, Wi-Fi access and enterprise networks.

NetPoint Pro n2S5S provides a factor of x2-x4 capacity increase and 90% effective noise mitigation. With dual radio architecture that supports beam forming in both 2.4 GHz and 5 GHz bands, the platform provides operators' with flexible deployment options. The NetPoint Pro n2S5S architecture is designed to support the latest Wi-Fi standards; 802.11n today and 802.11ac in future.

Netronics Next Generation xRF Beam delivers true 10x10:3 beam forming to increase the capacity by x2-x4. The focused beams and specialized noise filters provide 90% effective noise mitigation ensuring optimal performance in noisy environments. Netronics enhanced xRF beam forming supports multiple streams in MIMO configurations to provide superior performance for 802.11n Wi-Fi and beyond to 802.11ac.

Product Highlights

- 10x10:3 beam forming with 10 dual polarity antennas
- True beam forming combining all antennas together
- X2-x4 capacity increase
- 90% effective noise mitigation
- Dual radio beam forming at 2.4 GHz and 5 GHz
- Support 802.11n & beyond to 802.11ac
- Field-proven 3G/4G offload solution that delivers business value
- Fast, easy & affordable deployment of a high-quality network
- Maximum performance and interference mitigation
- Superior coverage and performance

Product Specifications

Radio

Wireless Network Standards	IEEE 802.11a/b/g/n											
Radio Interfaces	2.4 GHz Access: 802.11b/g/n 5 GHz Access/Mesh: 802.11a/n											
Frequency bands	2.412-2.472, 5.470-5.725, 5.725-5.825 GHz											
Smart Antennas technology	MIMO xRF™ beam forming technology, with 10 dual polarity (+/-45°) antennas per band 11n with 3 spatial streams 10x10:3											
Supported Rates	b: 1, 2, 5.5, 11 g: 6, 9, 12, 18, 24, 36, 48, 54 n: MCS0-MCS23 (6.5 - 450 Mbps)											
Antennas	2.4 GHz					5 GHz						
	Horizontal	120°				Omni	External N-Type connector					
	Vertical	44°				Horizontal	26°					
	Gain	13 dBi				Gain	14 dBi					
Modulation	802.11 b – DSSS (DBPSK , DQPSK, CCK) 802.11 a/g/n – OFDM (BPSK, QPSK, 16-QAM, 256-QAM)											
Tx Power (Max EIRP)	Up to 46.7 dBm @ 2.4 GHz, HT20 MCS0					Up to 44.7 dBm @ 5 GHz, HT20 MCS0						
	Up to 43.7 dBm @ 2.4 GHz, HT20 MCS9					Up to 41.7 dBm @ 5 GHz, HT20 MCS9						
Rx Sensitivity	802.11b	1 Mbps	2 Mbps	5.5 Mbps	11 Mbps							
		–102 dBm	–99 dBm	–92 dBm	–89 dBm							
	802.11g	6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps			
		–92 dBm	–91 dBm	–90 dBm	–89 dBm	–87 dBm	–85 dBm	–80 dBm	–79 dBm			
	802.11n @ 2.4 GHz HT20	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		–92 dBm	–90 dBm	–89 dBm	–87 dBm	–85 dBm	–80 dBm	–78 dBm	–77 dBm	–92 dBm	–90 dBm	–89 dBm	–86 dBm
		MCS12	MCS13	MCS14	MCS15	MCS16	MCS17	MCS18	MCS19	MCS20	MCS21	MCS22	MCS23
		–82 dBm	–78 dBm	–77 dBm	–75 dBm	–92 dBm	–90 dBm	–88 dBm	–84 dBm	–81 dBm	–77 dBm	–75 dBm	–74 dBm
	802.11n @ 2.4 GHz HT40	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		–89 dBm	–87 dBm	–86 dBm	–84 dBm	–82 dBm	–77 dBm	–75 dBm	–74 dBm	–89 dBm	–87 dBm	–86 dBm	–83 dBm
		MCS12	MCS13	MCS14	MCS15	MCS16	MCS17	MCS18	MCS19	MCS20	MCS21	MCS22	MCS23
		–79 dBm	–75 dBm	–74 dBm	–72 dBm	–89 dBm	–87 dBm	–85 dBm	–81 dBm	–78 dBm	–74 dBm	–72 dBm	–71 dBm
	802.11a	6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps				
		–95 dBm	–94 dBm	–92 dBm	–89 dBm	–86 dBm	–83 dBm	–78 dBm	–77 dBm				
	802.11n @ 5 GHz HT20	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		–93 dBm	–90 dBm	–89 dBm	–86 dBm	–83 dBm	–78 dBm	–77 dBm	–75 dBm	–93 dBm	–90 dBm	–87 dBm	–84 dBm
		MCS12	MCS13	MCS14	MCS15	MCS16	MCS17	MCS18	MCS19	MCS20	MCS21	MCS22	MCS23
		–80 dBm	–76 dBm	–75 dBm	–73 dBm	–93 dBm	–90 dBm	–88 dBm	–85 dBm	–82 dBm	–77 dBm	–75 dBm	–73 dBm
	802.11n @ 5 GHz HT40	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9	MCS10	MCS11
		–90 dBm	–87 dBm	–86 dBm	–83 dBm	–80 dBm	–75 dBm	–74 dBm	–72 dBm	–90 dBm	–87 dBm	–84 dBm	–81 dBm
		MCS12	MCS13	MCS14	MCS15	MCS16	MCS17	MCS18	MCS19	MCS20	MCS21	MCS22	MCS23
		–77 dBm	–73 dBm	–72 dBm	–70 dBm	–90 dBm	–87 dBm	–85 dBm	–82 dBm	–79 dBm	–74 dBm	–72 dBm	–70 dBm

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Networking

Networking	Self healing, Mesh
	Air Time Fairness
	Multiple ESSIDs' & BSSIDs'
	QoS, statistical traffic classification
	Fringe Zone client Ban
	WME
	802.11q VLAN
	Layer 2, 3 support
	DHCP Client

Authentication & Security	802.11i
	WPA/WPA2 (WPA-PSK, WPA-EAP, WPA-TKIP, WPA2-AES)
	WEP 64/128 bit, AES
	MAC filtering
	802.1x
	AES mesh encryption

Management	Netronics private, standard MIBs
	Local CLI via serial port Management
	SNMP v2 (configuration, statistics and alarms)
	Web interface
	Telnet/SSH CLI
Remote SW upgrade	FTP, TFTP, Web

Hardware

Interfaces	2 x IP67 Weatherproof RJ-45 GBE & PoE
	IP67 Weatherproof RJ-45 Serial port
	2 x IP67 N-Type 5GHz ext antenna connector (Option)
Power input	PoE -48 VDC

Dimensions (W x H x D)	29.5 x 34.5 x 9 cm
	11.6 x 13.6 x 3.5 in
Weight	5.55 kg, 12.24 lbs

Operating Temperature	-40° to 60°C, -40° to 140°F
Storage Temperature	-45° to 70°C, -49° to 158°F
Operating relative humidity	10% - 95% (non-condensing)
Non-operating relative humidity	0% - 95% (non-condensing)

*About NBF (Netronics Beam Forming)

NBF Smart Antenna Technology lies at the core of the NetPoint Pro n2S5S Performance. NetPoint Pro innovatively leverages state-of-the-art beam forming RF technology to deliver unmatched subscriber access combined with the best performance, coverage, and interference mitigation, resulting in more than twice the range, capacity and coverage.

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