



NetPoint Pro n2SM

The NetPoint Pro n2SM is a carrier-grade sector access point, which offers superior range and capacity by combining Netronics MIMO beam forming and the latest 802.11n Wi-Fi standard.

Combining 802.11n and MIMO beam forming, NetPoint Pro n2SM delivers the most powerful Wi-Fi solution for outdoor deployments. By enhancing the beam forming to support multiple streams in MIMO configurations, NetPoint Pro n2SM overcomes the technology limitations and extends the 802.11n range and capacity in noisy, urban environments.

Netronics Beam Forming (NBF) technology focuses communications to and from each client in a narrow beam. This advanced technology delivers 2 to 4 times the range and capacity, to any standard-based Wi-Fi client, in comparison to standard Wi-Fi access points. The beam forming technology combined with NetPoint Pro n2SM specialized channel filters deliver 90% effective noise mitigation in harsh, outdoor environments.

NetPoint Pro n2SM is the ideal solution for cellular operators deploying large scale 3G data offload and Wi-Fi access applications in dense urban conditions. NetPoint Pro n2SM is designed for mounting on cellular towers, rooftops and poles. With multi-block interference mitigation including patented 3G, WiMAX & Wi-Fi channel filters, the NetPoint Pro n2SM access point can be collocated with 3G BTS without performance degradation either for the AP or the 3G BST.



Product Highlights

- 802.11n Beam forming delivering unparalleled Wi-Fi coverage & capacity
- Superior 802.11 b/g/n accessed powered by NBF adaptive beam forming smart antenna technology
- Dedicated 802.11a radio for high-performance reliable mesh networking
- Field-proven 3G offload solution that delivers business value
- Co-location of Wi-Fi & 3G cells leveraging existing infrastructure assets
- Fast, easy & affordable deployment of a high-quality network
- Seamless integration into the cellular operators' network
- Flexible mesh architecture reducing initial expenditure
- Maximum performance and interference mitigation
- Superior coverage and performance



Product Specifications

Radio

Wireless Network Standards	IEEE 802.11a/b/g/n																	
Radio Interfaces	Access: 802.11b/g, Mesh: 802.11a																	
Frequency bands	2.412-2.472, 5.470-5.725, 5.725-5.825 GHz																	
Smart Antennas technology	NBF* smart antenna beam forming																	
Antennas	Integrated 2.4 GHz Sectoral Antenna								5 GHz									
	Horizontal				120°				Horizontal				360°					
	Vertical				46°				Vertical				15°					
	Gain				14 dBi				Gain				10 dBi					
Tx Power	Max EIRP																	
	2.4 GHz 42 dBm								5 GHz 30 dBm									
Rx Sensitivity (FCC)	802.11b		1 Mbps		2 Mbps		5.5 Mbps		11 Mbps									
			-102 dBm		-99 dBm		-95 dBm		-94 dBm									
	802.11g		6 Mbps		9 Mbps		12 Mbps		18 Mbps		24Mbps		36 Mbps		48 Mbps		54 Mbps	
			-94 dBm		-94 dBm		-94 dBm		-92 dBm		-90 dBm		-84 dBm		-81 dBm		-80 dBm	
	802.11n @2.4 GHz		MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MCS	
			S0	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
			-94	-93	-91	-89	-85	-82	-76	-73	-93	-92	-89	-86	-83	-78	-77	-74
	802.11a		6 Mbps		9 Mbps		12 Mbps		18 Mbps		24 Mbps		36 Mbps		48 Mbps		54 Mbps	
		-93 dBm		-93 dBm		-92 dBm		-91 dBm		-88 dBm		-82 dBm		-80 dBm		-79 dBm		
802.11n @5GHz		MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MCS		
		S0	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	
		-93	-92	-90	-88	-84	-81	-75	-72	-93	-91	-88	-87	-82	-77	-76	-73	
Modulation	802.11 b		DSSS (DBPSK , DQPSK, CCK)															
	802.11 a/g/n		OFDM (BPSK, QPSK, 16-QAM, 64-QAM)															

Networking

Wireless	Self healing, self assembling Mesh															
	WDS CPE support															
	Multiple ESSIDs' & BSSIDs'															
Authentication & Security	802.11i															
	WPA/WPA2															
	(WPA-PSK, WPA-EAP)															
	WEP 64/128 bit encryption															
	MAC filtering															
	802.1x															
	AES mesh encryption															
QOS	Statistical traffic classification															
	802.11q VLAN															
	WME															
IP Protocol	Layer 2, 3 support															
	DHCP Client															
Management	Private, standard MIBs															
	Local CLI via serial port															
	SNMP v2 (NMS) (configuration, statistics and alarms)															
	Web interface															
Remote SW upgrade	Telnet/SSH CLI															
	FTP, TFTP, Web															

Hardware

Interfaces	IP67 Weatherproof RJ-45 GBE															
	IP67 Weatherproof RJ-45 Serial port															
Power input	PoE-48 VDC															
Power consumption	38 W															
Dimensions (W x D x H)	34 x 25.6 x 10.8 cm															
	13.4 x 10.1 x 4.3 in															
Weight	5.2 kg, 11.46 lbs															
Installation	Generic mount for pole and wall installations															
Operating Temperature	-40° to 55 °C, -40° to 131 °F															
	Storage Temperature															
Operating relative humidity	-40° to 60 °C, -40° to 140 °F															
Non-operating relative humidity	15% - 100% (non-condensing)															
	5% - 95% (non-condensing)															

Standards

EMC Standards	US: FCC Part 15.107 and 15.109															
	Europe: EN 301.489-1 and -17															
EMI and Susceptibility (Class B)	US: FCC Part 15.107 and 15.109															
	Europe: EN 301.489-1 and -17															
Safety	US, Canada: UL 1950															
	US, Canada: UL 60950-1															
	Europe: EN 60950-1															
Environmental	Wind: >165 mph															
	Up to 100 mph sustaining,															
	Up to 165 mph gusts)															
	Europe: EN 300.019-2-4 class 4.1 and EN 300.019-2-2 class 2.3															

*About NBF (Netronics Beam Forming)

NBF Smart Antenna Technology lies at the core of the NetPoint Pro n2SM 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.

