



NetPoint Pro is a family of advanced outdoor Wi-Fi base stations operating in the 2.4 unlicensed bands. NetPoint Pro base stations use spatially adaptive Beam Forming together with 802.11g/n to deliver best range and capacity, addressing the rapidly growing needs for operators to deliver new content-rich services, while maintaining quality of service and profitability.

NetPoint Pro base stations enable service providers, governments and enterprises to deliver high quality Wi-Fi services in metro and rural areas, with significantly fewer base stations, and at much lower costs.

NetPoint Pro base stations combine Netronics Beam Forming and interference immunity technologies together with 802.11g/n MIMO technology, delivering best capacity and coverage, with speeds of up to 450 Mbps (802.11n compliant models). NetPoint Pro is a new market milestone.

NetPoint Pro base stations are available in Omni and Sector form factors, with 2.4 and 5 GHz band support, integrated mesh backhauling, and a full set of carrier class features built-in to the unit. NetPoint Pro is complemented by Netronics service provisioning and management tools, enabling numerous urban and rural applications at the lowest cost per bit.

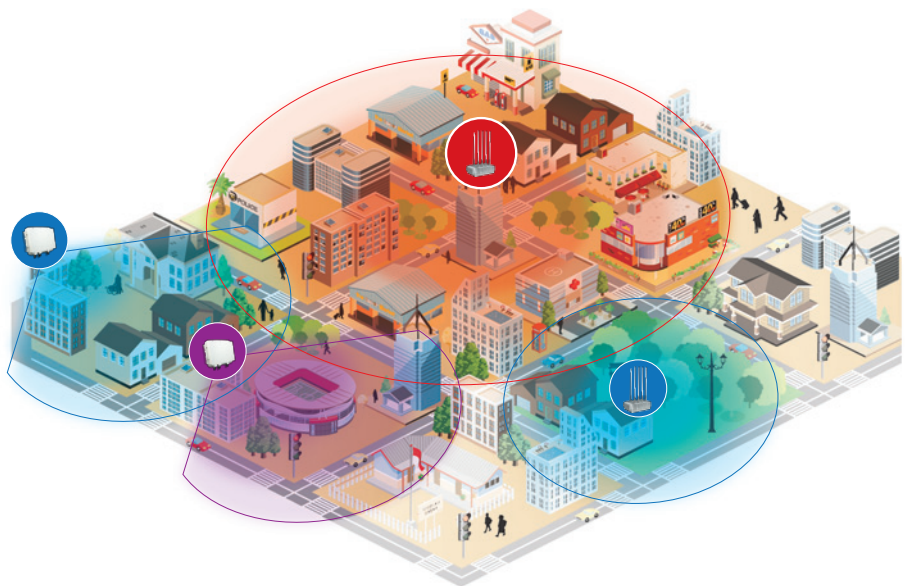
NetPoint Pro base stations are carrier grade IP-67 compliant, designed to provide the highest reliability, quality of service, security and manageability. NetPoint Pro base stations come with a complete set of FCAPS management tools.

NetPoint Pro

Carrier Class WiFi Base Stations for Outdoor Wifi Coverage, Compliant with 802.11g/n Standard

Product Highlights

- Compatible with all 802.11 a/b/g/n clients
- Beam forming technology for wide coverage
- Null forming technology for eliminating interference
- Ruggedized IP 67 compliant enclosure
- Exceptional NLOS performance
- Advanced Interference resilience features
- Self Healing Mesh Backhaul



Key Benefits

(see inside page)

Speed
450 Mb
54 Mb
802.11 n
802.11 g

Cell Radius
20 Km
1000 m
Outdoor CPE
Laptop/Smart phone

Frequency
2.4 GHz
5.8 GHz
Access
Mesh Backhaul

Connectivity
IP
VOIP
Gigabit
Ethernet

Ant. Tech.
MIMO
Single Stream (11g)
Multi-Stream (11n)



Sector

Product	Capacity	Mesh	Standard
Net Point Pro 3x2.4 G2	54 Mbps , 250 users	No	802.11 g
Net Point Pro n2S	450 Mbps , 250 users	No	802.11 n



Sector Mesh

Product	Capacity	5.8 GHz Mesh	Standard
Net Point Pro 3x2.4 G2M	54 Mbps , 250 users	✓	802.11 g
Net Point Pro n2SM	450 Mbps , 250 users	✓	802.11 n



Omni

Product	Capacity	Mesh	Standard
Net Point Pro 6X2.4 G2	54 Mbps , 250 users	No	802.11 g
Net Point Pro n2C	450 Mbps , 250 users	No	802.11 n

Product	Capacity	5.8 GHz Mesh	Standard
Net Point Pro 6X2.4 G2M	54 Mbps , 250 users	✓	802.11 g
Net Point Pro n2CM	450 Mbps , 250 users	✓	802.11 n

Key Benefits

- **A Base Station Made for Outdoor WiFi**
With WiFi being a protocol mainly designed for indoor networking it is not optimized for outdoor use. NetPoint Pro is equipped with technologies overcoming the radio communications challenges of using WiFi in outdoor environments.
- **Extended Outdoor and Indoor Coverage**
The true spatially adaptive Beam Forming leverages a unique High Gain Diversely Polarized (HGDP) antenna array for maximum performance. With the beam forming signals traveling in different propagation paths are coherently combined at the receiver's antenna. This increases coverage by up to 50%, enables NLOS connectivity and indoor signal penetration.
- **Carrier Grade**
NetPoint Pro base stations are designed for high reliability and manageability, including a robust IP-67 enclosure for harsh environments, security and QoS features, FCAPS management suite, and simple and easy installation. NetPoint Pro base stations are designed for integration and homologation with carriers' core. The Rich feature set for controlling the service offered using the system turned NetPoint Pro into the ultimate choice for provision of outdoor WiFi service by carriers and ISPs.
- **Fastest Return On Investment**
With fewer sites required per covered area, highest network reliability and enhanced service options, NetPoint Pro n provides up to 50% savings of CAPEX and OPEX and the fastest ROI.

Omni Mesh





Common installation topologies

- Single base station
- Multiple base stations connected through self healing mesh backhaul network
- A network of base stations connected to each other and the backbone via fibre or a Point to Multi-Point wireless network.

Applications

Netronics NetPoint Pro base stations enable carriers, internet service providers, governments and private networks to deploy outdoor Wi-Fi networks in metropolitan and rural areas, for a variety of applications:

- Carriers and Internet Service Providers
- Seamless cellular data off-loading
- Hot-zone and hot-spots
- Residential and business access
- Rural communities
- Government and Private Networks
- Education schools and universities
- Municipal networks and safe cities
- Health
- Hospitality
- Oil and gas
- Industrial and construction sites
- Mining
- Terminal hubs, malls and large venues
- Smart power grid
- Automatic meter reading and telemetry

• Interference Resilience Features

The Dynamic Interference Handling (DIH) algorithm continuously optimizes receiver's parameters according to noise level. The Automatic Channel Selection (ACS) algorithm picks the best operating channel. The Adaptive Modulation automatically chooses the optimal rate in environments with high interference.

• Advanced Beam Forming Technology

RF level antenna beam forming enhanced the range by improving the reception from client devices with low RF power. The smart antenna array makes it possible to communicate with clients through a digitally formed virtual antenna with directional beam and high gain.

• Null Forming Technology

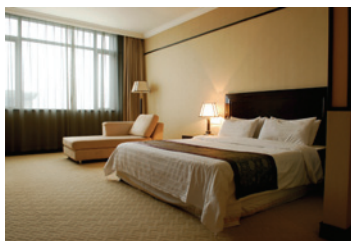
NetPoint Pro can recognize the direction of interfering base stations and clients transmitting in the same channel but not belonging to the same network. The final antenna beam is managed to have nulls in the direction in which the interference is coming. This feature significantly improves the coverage and performance in highly interfered environments.

• Enhanced Range and Capacity with Low Power Clients

The major challenge in WiFi coverage is establishing the Up Link (the link between the low power client transmitter and the base station receiver). NetPoint Pro utilizes its beam forming technology to improve the radio link budget in up link to make it possible to have long range and wide coverage as well as high capacity, even when the client device is a low power laptop to smart phone.



Video Surveillance



Hotels and Resorts



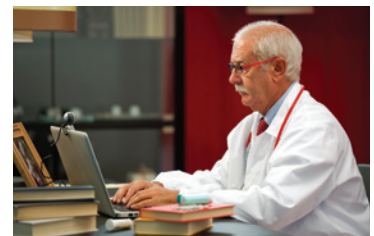
Digital City



Seamless Cellular Offloading



Residential and Business Access



Hospitals and Health Clinics



About Netronics

Netronics Technologies is a leading provider of networking and communications equipment based in Ontario, Canada. Our product portfolio consists of data and voice communications and networking equipment based on the latest radio communication technologies.

Netronics Communications, a subsidiary of Netronics Technologies, have provided its market with high quality and highly reliable carrier class equipment serving the different market sectors from large government organizations, to enterprises in oil and gas and banking sector, to telecom service providers, and down to small Internet service providers.

Netronics is a one stop shop for wireless communications and voice/data transmission equipment needed for today's bandwidth thirsty market. "Netronics has one of the widest ranges of wireless networking solutions under a single brand"

Netronics has successfully leveraged its technical knowledge in provision of connectivity to urban and rural areas in many developing countries, where wireless communications is the most suitable type of connectivity solution.

Netronics has utilized a deep knowledge of radio technology to offer a complete range of connectivity solutions with suitable products for applications in different sizes and functionalities.



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