



nex-G MonoReach

Supporting IEEE 802.11a/b/g standards, and featuring a tri-band, software-selectable frequency design, the MonoReach is a carrier class, outdoor infrastructure product offering a flexible and secure solution for a variety of market applications.

Cost effective, carrier class performance

MonoReach is optimized as an access point, but can also function as a client, and offers carrier class performance and reliability in either mode.

- ▣ High capacity
- ▣ Complete designed-in reliability

Superior flexibility and scalability

Support of the IEEE 802.11 a/b/g standards provides a high degree of flexibility. MonoReach also enables scalable networks.

- ▣ Software selectable ISM frequency bands 2.4 GHz and 5 GHz
- ▣ Auxilliary serial port for control of external devices
- ▣ Rapid association for WiFi compatible clients
- ▣ Network can scale from small to very large deployments

Unmatched Security

MonoReach offers a highly secure connection to the subscriber with

- ▣ WEP64/128
- ▣ WPA2, 802.11i, 802.1x support

SLA support

MonoReach allows service providers to meet their SLA requirements with

- ▣ QoS
- ▣ Bandwidth control

Ease of upgrade

Protecting your investment and remaining up to date is easy with MonoReach

- ▣ Remotely upgradeable firmware
- ▣ 16MByte of flash enabling extensive enhancements

Multiple management tools

MonoReach is equipped with several different management interfaces

▣ Device level

- CLI (SSH, Telnet, SNMP, Web GUI)

▣ Powerful central web-based management system – nex-G configurator, offering

- Automatic device discovery
- Fully automated performance monitoring
- Ability to schedule network configuration changes

Easy to deploy, rugged, Pole-mountable solution

MonoReach features an attractive outdoor enclosure built to withstand the most extreme weather conditions, and is designed to enable quick and easy deployment

- ▣ Robust aluminium casing
- ▣ Weatherproof
- ▣ Power over Ethernet

Target Applications

- ▣ WISP / ISP infrastructure
- ▣ Carrier grade access point or client for business applications
- ▣ Last mile broadband wireless distribution networks
- ▣ Distributed branch offices, campus and industrial environments
- ▣ Wireless VoIP infrastructure enabling value added services
- ▣ Security and surveillance



MonoReach - Last mile connectivity
Last mile wireless broadband connectivity for residential and multi-tenant/multi-dwelling units



MonoReach - Industrial
Last mile wireless broadband connectivity for industrial areas

Carrier class

Flexible

Secure

Easy to
deploy and
manage

Cost effective

Technical Specifications

Management

- WEB management via HTTPS
- Command line management via SSH and serial console
- Configuration file upload via HTTPS and FTP
- RCMS configuration, firmware management and status reporting agent with NAT/Firewall traversal functionality
- Subnet or VLAN for management traffic
- Management access control list
- Administrator authentication via RADIUS or TACACS
- SNMP V1/2/3
- SNMP Traps

Security

- WPA/WPA2 personal and enterprise (with dynamic key from remote RADIUS server) TKIP, AES (CCMP)
- Secure WDS mode, WDS inter access point traffic is secured by WPA/WPA2 in personal or enterprise modes
- Static and dynamic WEP
- 802.1x with EAP-MD5, EAP-TLS, EAP-PEAP, EAP-TTLS, EAP-SIM, EAP-LEAP
- Layer 2 intra access point client isolation
- SSID broadcasting suppression
- Static wireless Access Control List, MAC address filtering

Physical and Electrical

- Power over Ethernet (PoE) compliant with 802.3af (-48V)
- Power consumption: 15 Watts
- LEDs: Power, Radio and Ethernet lamps
- Antenna Connector: N Female
- Network Connection: Single weatherproof, industrial-grade RJ45 (10/100 Base T Auto MDX)
- USB Serial Console: Mini USB interface for configuration
- Dimensions: 207mm (W) x 243mm (H) x 71mm (D)
- Weight : 2.4kg with mounting brackets

Warranty

- Hardware: One (1) year on parts and labour ; return to point of purchase
- Software: 90 days extendable
- Optional standard and premium support packages available

Wireless

- Multiple-radio platform up to 4 radios – access and backhaul radio IEEE 802.11 a/b/g
- Modulation:
 - 802.11a, 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)
 - 802.11b: DSSS (CCK, DQPSK, DBPSK)
- Frequency Band:
 - 2.400–2.483 GHz; 4.940–5.150, 5.150–5.250, 5.250–5.350, 5.420–5.725, 5.725–5.850 GHz
 - (Channel availability subject to country specific regulatory approvals)
- TX Power: Up to 4W EIRP depending on antenna configuration
- 7dBi – 12dBi Omnidirectional antennas (optional – order separately)
- Transmit Power Control (TPC)
- Dynamic Frequency Selection (DFS)
- RX Sensitivity:

2.4GHz	5GHz
97dBm @ 1Mbps	94dBm @ 6Mbps
92dBm @ 11 Mbps	74dBm @ 54 Mbps

Networking

- VLAN tagging, up to 4096 VLAN tags, VLAN pass-through
- Bridging, spanning tree protocol (STP)
- IP routing
- DHCP server, client, relay
- DNS relay/proxy
- NTP and internal clock support
- Per VLAN, Virtual AP (MBSSID), IP tunnel or physical interface networking settings
- 802.1x authenticator
- 802.1x supplicant
- MAC filtering per interface
- IP filtering per interface
- Stateful inspection firewall
- Digital certificates for device identification
- IPsec with static keys and dynamic re-keying, hardware acceleration for the nex-G platform
- Multiple GRE tunnels
- NAT/NAPT/ IP masquerading per interface and VLAN/Virtual AP (MBSSID)
- IP level QoS for VoIP and multimedia
- QoS per service (HTTP, SSH) or per a host IP address and port
- Dfsserv with 802.1p mapping
- DOS protection
- P2P traffic management

Environmental Specifications

- Operating Temperature: -40° C to + 60°
- Storage Temperature: -40° C to + 85° C
- Weather Rating: IP66 / Nema 4 Rating
- Wind Survivability: > 265 km/h
- Operating Humidity: 5% to 95% non-condensing
- Wind Loading (265 km/h): ~ 1020 Newtons
- Shock & Vibration: ETSI 300-019-1-4

Approvals

- Radio: FCC part 15
- CE mark

Package Accessories

- Mounting Bracket and accessories
- PoE
- Hardware Installation Guides

Optional Accessories

- 7 - 10dBi omni directional antenna 2.4GHz / 5.8GHz

