



# nEX-G MultiReach

**Outdoor Dual Radio Infrastructure Solution**  
Supporting IEEE 802.11a/b/g standards, and featuring a dual radio design along with software-selectable tri-band support, the MultiReach is a carrier class, outdoor infrastructure product offering a powerful and extremely flexible solution for a variety of market applications.



Two radios  
Carrier class  
Flexible  
Secure  
Scaleable  
Easy to  
deploy and  
manage

### Carrier class performance

MultiReach is optimized as a dual radio access point, but can also function as a client, or a combination of both, and offers carrier class performance and reliability in all 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, and the dual radio design doubles capacity and greatly increases geographical coverage.

- Software selectable ISM frequency bands 2.4 GHz and 5 GHz
- Simultaneous multi-band operation enabled by dual radio architecture
- Rapid association for WiFi compatible clients
- Network can easily scale from small to very large deployments

### Unmatched Security

MultiReach offers a highly secure connection to the subscriber with

- WEP64/128
- WPA2, 802.11i, 802.1x support
- End-to-end link encryption

### SLA support

MultiReach 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 MultiReach

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

### Multiple management tools

MultiReach 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

MultiReach 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

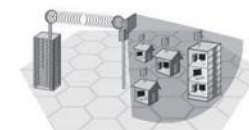
### Target Applications

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



**Last mile connectivity MultiReach**

Multi functional outdoor wireless connectivity for suburban and rural broadband expansion



**Last mile plus backhaul**

High capacity wireless backhaul and last mile distribution

# Technical Specifications

## Wireless

- Multiple-radio platform up to 2 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 Omni directional 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

- Staging antennas 4dBi, 1 pair
- 7 - 10dBi omni directional antenna 2.4GHz

## 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 x 2
- 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

