



## nex-G LongReach



**The ultimate wireless Point-to-Point solution**  
Providing seamless, carrier class, point-to-point wireless connectivity, LongReach is the ideal bridging solution for building-to-building connectivity and backhaul, enabling extensive, scalable wireless networks in the license-exempt 5 GHz frequency range.

Carrier class

Secure

Scaleable

Remote central management

High gain parabolic antennas

Built-in 10/100BaseT interface

Easy to deploy

### High throughput at long range

Achieve high throughput over extended distances with LongReach.

- Advanced OFDM modulation scheme
- 400mw high performance radio

- Attractive compact design
- Enhanced thermal cooling
- Rugged
- Weather-proof

### Scaleable, carrier class performance and reliability

Extensive RF and networking features ensure

- Maximum bit rate
- Minimum propagation delay
- High receiver sensitivity
- Interference-free operation

### Easy deployment

LongReach has a number of features which enable quick and easy installation and deployment

- Power over Ethernet (PoE)
- Antenna alignment LEDs

### Unmatched Security

Multiple security measures ensure privacy protection:

- End-to-end link encryption
- VPN capabilities

### Target Application

- Point-to-point ISP/telco voice and data backhaul links for quick and easy rollout of broadband network
- Enterprise network connectivity for dispersed offices, campus buildings and remote employees
- High speed, high capacity wireless alternative to expensive leased lines

### Multiple management tools

Powerful central web-based management system – nex-G configurator - provides

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

### Robust tower mountable solution

Outdoor enclosure built to withstand the most extreme weather conditions:



WISP Backhaul

Building cost effective point to point backhaul links for expansion of broadband coverage area by ISP's



Point to Point Backhaul

Secure building to building wireless connectivity for enterprise customers

# Technical Specifications

## Specifications

### Warranty

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

### Approvals

- Radio: FCC part 15
- CE mark

### Package Accessories

- Mounting Bracket and accessories
- PoE
- Hardware Installation Guides

### Wireless

- 1 radio platform – backhaul radio IEEE 802.11 a/b/g (200 mw) or 11a 400 mw
- 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)
- Receive Sensitivity:  
5GHz: 74dBm @ 54 Mbps and 94dBm @ 6Mbps  
Enhanced receive sensitivity (extra 24dBm gain)

### Antenna (Optional)

- 45 cm Parabolic – 25 dBi gain
- 60 cm Parabolic – 28 dBi gain
- 5.470 – 5.875 GHz

### Networking

- Bridging, spanning tree protocol (STP)
- IP routing
- Per VLAN, Virtual AP (MBSSID), IP tunnel or physical interface networking settings
- 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
- P2P traffic management

### 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
- 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

### 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: 250.5mm (W) x 293mm (H) x80mm (D)
- Weight : 3.6 kg with mounting brackets

### 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

