

Wireless

- **Wireless Network Standards:** IEEE 802.11b, 802.11g, 802.11a
- **Number of Channels (Access):** Two simultaneous, non-overlapping 802.11b/g channels (Rx and Tx) for WLS
- **Frequency band (Access):** 2.412-2.472 GHz
- **xRF adaptive beamforming smart antenna engine**
- **Antenna (WLS):**
 - Type: Integrated sector directional
 - Azimuth coverage: 120° (horizontal)
 - Gain: 14 dBi (ETSI, MII), 14.5, 16.2 dBi (FCC)
- **Antenna (WLP):**
 - Omni 14dBi antenna array
- **Antenna (WLF):**
 - Omni 4 dBi or 8 dBi antenna
- **Wireless Backhaul: 802.11a**
- **Frequency bands (Backhaul):** 5.15-5.25, 5.25-5.35, 5.47-5.725, 5.725-5.85 GHz
- **Media Access Protocol:** CSMA/CA (Carrier Sense Multiple Access/Collision Avoidance) with ACK
- **EIRP (Access):**
 - ETSI: 20 dBm
 - FCC: 42 dBm
 - MII (China): 27 dBm
- **Rx Sensitivity (WLS/P):**
 - 802.11b: -102 dBm @ 1 Mbps, -99 dBm @ 2 Mbps, 95 dBm @ 5.5 Mbps, -89 dBm @ 11 Mbps
 - 802.11g: -96 dBm @ 6 Mbps, -88 @ 24 Mbps, 82 dBm @ 48 Mbps, -80 dBm @ 54 Mbps
 - 802.11a: -90 dBm @ 6 Mbps, -82 dBm @ 24 Mbps, -72 dBm @ 54 Mbps
- **NMS network and RF optimization tools**

Networking

- QoS, traffic classification
- Layer 2 support and VLAN tagging
- Multiple virtual APs with multiple BSSIDs

- Traffic capping
- Full standard RADIUS/AAA server support

Management

- GO private, standard MIBs
- Local CLI via serial port
- Remote configuration upload/download
- SNMP v2, v3 (NMS)
- Telnet/SSH (configuration, statistics and alarms)
- (remote initial configurations) DHCP client
- Remote Software Upgrade
- FTP, TFTP, Web

Authentication and Security

- Web authentication support
- WPA-PSK, 40/128 bit WEP encryption
- Standard RADIUS server interface

Interfaces

- **Micro Wi-Fi Sector Base Station, Pico Wi-Fi Base Station, Femto Wi-Fi Base Station:**
 - IP67 weatherproof RJ-45 10/100 Base T (Auto-MDIX)
 - Serial port (configuration)

Hardware Specifications

- **Micro Wi-Fi Sector Base Station:**
 - Dimensions: 40 x 60 x 7 cm, 15.7 x 23.6 x 2.7 in (W x H x D)
 - Weight: 7.6 kg, 16.75 lbs
 - Installation:
 - Wall mount
 - Pole mount
 - Operating Temperature: -40° to 55°C, -40° to 131° F
 - Storage Temperature: -40° to 60°C, -40° to 140°
- **Pico Wi-Fi Base Station:**
 - Dimensions: 30 x 20 x 10 cm, 11.8 x 7.8 x 3.9 in (W x H x D)
 - Weight: 6.4 kg, 14 lbs

- **Installation:**
 - Wall mount
 - Pole mount
- Operating Temperature: -40° to 55°C, -40° to 131° F
- Storage Temperature: -40° to 60°C, -40° to 140° F
- Optional Accessories:
 - BH Directional Antenna

Femto Wi-Fi Base Station:

- Dimensions: 17.2 x 16.5 x 23 cm, 7 x 6.5 x 9 in (W x H x D)
- Weight: 3.5 kg, 7.7 lbs
- Installation:
 - Wall mount
 - Pole mount
- Operating Temperature: -40° to 55°C, -40° to 131° F
- Storage Temperature: -40° to 60°C, -40° to 140° F
- Optional Accessories:
 - BH Directional Antenna

Standards Compliance

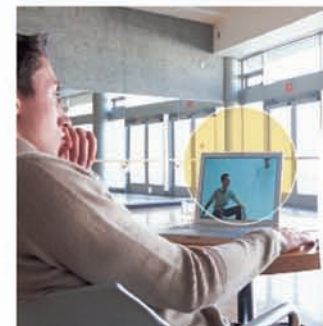
- EMC Standards
- US: FCC Part 15.107 and 15.109
- Europe: EN 301.489-1 and -17
- EMI and Susceptibility
- US: FCC Part 15.107 and 15.109
- Canada: ICES-003
- Europe: EN 301.489-1 and -17, EN 55022 and EN 55024, EN 6100-3-2 and EN 6100-3-3
- Safety Standards
- US, Canada: UL 60950-1
- Europe: EN 60950-1
- Environmental
- Europe: EN 300.019-2-1, EN 300.019-2-2 and EN 300.019-2-3, EN 300.019-2-4 class 4.1



- High performance cellular Wi-Fi architecture
- Carrier class scalability and reliability
- Delivery of next generation services
- Unmatched economics

GO NET SYSTEMS METRO BROADBAND WIRELESS SYSTEM

The Industry's First Carrier Wi-Fi System for Next Generation Mobile Broadband Access



Contact Information

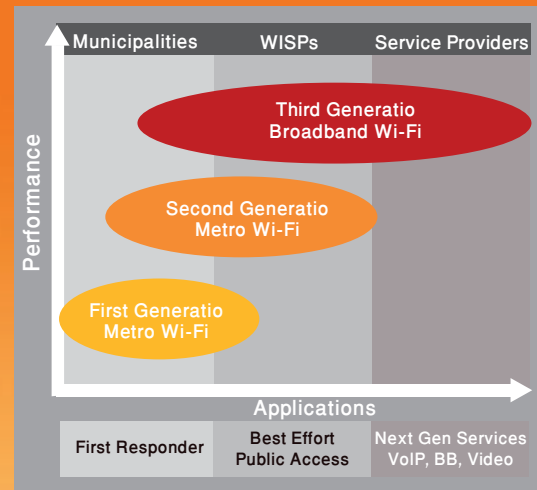
1943 Landings Drive,
Mountain View, CA 94043, U.S.A.
Tel: +1.650.962.2000
Fax: +1.650.962.2010
Email: info@GoNetworks.com
www.GoNetworks.com

ABOUT GO NET SYSTEMS

GO Net Systems provides carrier class, cost effective Mobile Broadband Wireless solutions based on cellular Mesh architecture for large scale, high capacity Metro deployments that deliver the performance, scalability, quality and economics required for next-generation services. GO Nets' products offer superior coverage, capacity and economics for service providers and content carriers in fast-growth global markets, and are designed to provide a complete wireless networking solution for voice, video, data and mobility based on 802.11 (Wi-Fi) standards. GO Net System has offices in U.S.A, Korea, Brazil and Germany. Backed by a group of venture capital fund, private investors and a public company GO Net Systems is best positioned to become a world leader in supplying outdoor Wi-Fi solutions.

Metro Wi-Fi Evolution

The Metro Wi-Fi market is experiencing dramatic, multidimensional changes. The services supported on Metro Wi-Fi networks as well as the nature of the operators of such networks have evolved, transforming in turn the Metro Wi-Fi network infrastructure requirements. First generation Metro Wi-Fi solutions were deployed by municipalities to support first responders and local law enforcement applications that required momentum, Wireless Internet Service Providers (WISPs) began to deploy second generation limited coverage and limited capacity. As Metro Wi-Fi gained Metro Wi-Fi offerings to deliver best-effort, narrowband Wireless DSL (WDSL) and public access services. Now in its third phase, Metro Wi-Fi is expected to deliver metro-wide coverage and support real-time services such as Wireless VoIP (W-VoIP), gaming and multimedia. At the same time, a new breed of "content carriers", service providers and MSOs eager to deliver metro Wi-Fi services, has emerged only to uncover the capacity, performance and economical shortcomings of existing Metro Wi-Fi solutions. Today's market demands third-generation Metro Wi-Fi infrastructure solutions.

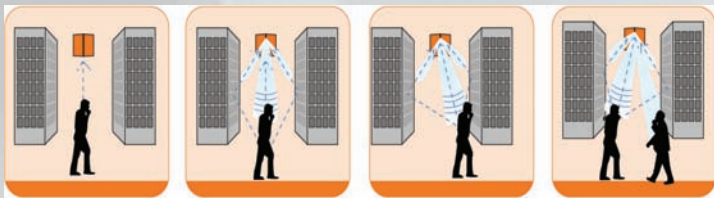


Third Generation Metro Wi-Fi

The GO Metro Broadband Wireless solution is the first carrier class Cellular Wi-Fi system to deliver the performance, scalability, quality and economics necessary to deliver next-generation services over Metro Wi-Fi networks. The GO MBW Solution's key elements are:

- xRF™ Adaptive Beamforming Smart Antenna Engine
- Multi-Service Delivery System, powered by GOs' Mesh network and RF optimization tools
- Micro / Pico / Femto Cellular Wi-Fi Architecture

xRF Adaptive Beamforming Smart Antenna Engine



GO's xRF engine is the industry's only smart antenna solution for Metro Mesh Wi-Fi base stations available today. On the receive side, xRF constructively combines signals received through reflections, overcoming the detrimental effects of multipath and significantly improving the signal-to-noise ratio (SNR). On the transmit side, the xRF engine dynamically forms highly focused beams toward the client, effectively increasing the system's range and throughput by 2-3 times compared to existing solutions, and leading to a reduction of over 50% in the number of base-stations deployed.

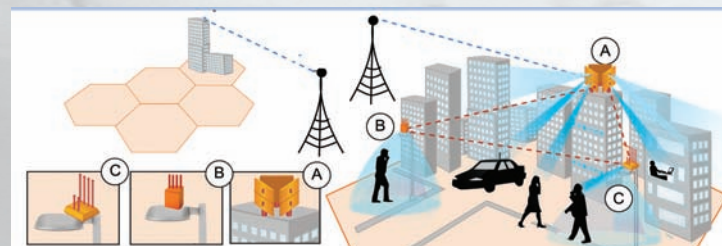
Multi Service Mesh System

The GO MBW's Mesh suite of network and RF optimization tools enables service providers to monitor and automatically reconfigure their Wi-Fi infrastructure to meet varying RF environments, networking requirements, and user loads. GOs' mesh also features powerful, patent-pending QoS algorithms for preferential queuing and delivery of delay-sensitive VoIP traffic. The MBW's Multi-Service Delivery System supports QoS levels of data, voice and multimedia service provisioning for a true next generation, multi-service network.

Micro, Pico and Femto Cellular Wi-Fi Architecture

The micro/pico/femto Cellular Mesh Wi-Fi architecture is a novel topology for Metro Wi-Fi networks that builds on the strengths of existing cellular and mesh architectures while providing the coverage, capacity, and scalability required to deliver next generation services.

- Scalable Coverage – The GO MBW introduces a three-tiered base station solution to meet the varying coverage and capacity challenges encountered in metro areas. A Micro Wi-Fi Sector Base Station (WLS) provides wide area coverage and unmatched capacity, and is complemented by Pico Wi-Fi Base Stations (WLP), used to enhance coverage in challenging RF environments and increase capacity in high traffic load areas and a small but powerful Femto Wi-Fi Base Stations (WLF), for improved coverage and capacity injection. This highly scalable micro/pico/femto topology provides unprecedented flexibility for service providers deploying Metro Wi-Fi networks.
- Unmatched Capacity – The combination of micro, pico and femto cells allows service providers to dynamically adjust for varying capacity requirements. Mesh network support enhances its multi service delivery capabilities by integrating GO's unique Mesh network and RF optimization algorithms. GO's mesh allows the GO MBW to preserve optimal throughput in each individual cell, increasing the network's overall capacity.



GO MBW SYSTEM ELEMENTS

MBW WLS Micro Cellular Wi-Fi Sector Base Station

The WLS is the centerpiece of GO's Cellular Wi-Fi network architecture. The WLS includes a 120° antenna array, supports multi-channel operation for both backhaul and access, and is powered by GO's xRF adaptive beamforming engine, delivering unmatched coverage and capacity. It is designed for rooftop, cellular tower, and wall-mounted deployments.



KEY FEATURE:

- Industry's first micro cellular-mesh Wi-Fi sector base station
- Superior dual-radio 802.11 b/g access powered by xRF™ smart antenna technology
- Dedicated 802.11a radio for high-performance, reliable mesh networking
- Multiple virtual APs with multiple BSSIDs
- MBW EMS/NMS for Element, Network and RF Optimization

MBW WLP Pico Cellular Wi-Fi Sector Base Station

The WLP designed to deliver street-level coverage, has a single xRF omni 802.11b/g antenna array, and multiple 802.11a BH radios. The WLP's attractive form factor lends itself to a wide variety of mounting options (wall, pole, streetlight). It is the first base station to deliver omnidirectional (360°) coverage while retaining full xRF smart antenna engine functionality for enhanced capacity and range.



KEY FEATURE:

- Robust weather-proof pico cellular-mesh Wi-Fi base station
- Superior 802.11 b/g access powered by xRF™ smart antenna technology
- Dedicated 802.11a radio for high-performance, reliable mesh networking
- Multiple virtual APs with multiple BSSIDs
- MBW EMS/NMS for Element, Network and RF Optimization

MBW WLF Femto Cellular Wi-Fi Sector Base Station

The GO Nets' WLF complements GOs' MBW 2000 and 1000 series products by offering femto cell Wi-Fi for enhanced coverage and capacity injection. The WLF is a Mesh Wi-Fi Base Station with an omnidirectional weather-proof design optimized for street-level light pole/utility pole Wi-Fi applications. The WLF is equipped with one 802.11b/g access radio for femto cell access and coverage and a 802.11a channel for high-performance mesh networking.



KEY FEATURE:

- Cost-effective femto cellular-mesh Wi-Fi base station
- Designed for simple, fast and economical deployments
- Dual-radio 802.11b/g access; 802.11a for mesh networking
- Multiple virtual APs with multiple BSSIDs
- MBW EMS/NMS for real-time Element, Network and RF Optimization

MBW Base Station Network Management

The GO Net Systems Mobile Broadband Wireless (MBW) Element Management System (EMS) / Network Management System (NMS) platform is a carrier-grade management solution providing a comprehensive and intuitive interface to automatically discover, configure, and monitor the status and performance of GO Nets' Wi-Fi network elements and network deployments.



KEY FEATURE:

- Network device discovery and mapping
- Device configuration and management
- Fault and alarm management / notification
- Element and network performance management
- Security management

THE GO EDGE: Unmatched Economics

The GO Metro Broadband Wireless advanced approach to deploying large scale mobile broadband wireless networks results in Metro Wi-Fi networks that offer the industry's lowest Total Cost of Ownership. The GO MBW:

- Leverages Cellular Wi-Fi architecture to deliver unmatched network scalability and flexibility thanks to the combination of micro/pico/femto base stations with xRF and Mesh technologies for extended range, enhanced capacity and superior performance

- Reduces the number of base stations deployed by more than 50%, resulting in lower upfront CAPEX and lower recurring OPEX for maintenance

- Supports highly profitable, next generation services, allowing service providers to meet the demands of their customer base for Wireless VoIP, multimedia, gaming, and other high value applications