Unparalled Access Point
IP67 Gigabit Point-to-Multipoint

Network Scalability Perfected

Unique integrated high precision GPS Sync technology in each Unparalled Access Point allows every deployed device to be collaboratively synchronized across the network. This allows easy channel reuse tosave valuable spectrum network wide, and together with the Cloud is incredibly simple to deploy and optimize network spectrum use and performance across all your deployed devices.

Ultra Capacity TDMD

Time Division Multiplexed Access (TDMA) techniques have proven to provide significant improvements when scaling the number of clients, versus Carrier Sensing approaches used in the Wi-Fi technologies. When further optimized by dynamically allocating timeslots and supporting Multi-User MIMO in the downstream direction, and allocate upstream timeslots upon client request, network scale, spectrum efficiency and access point utilization are optimized to the highest degree possible.

Overview

Faster than a streaming millennial and more powerful to enable suburban and urban applications. The Shogun unique quad-panel MIMO technology delivers industry leading performance for high density short-range multipoint broadband applications.

Function

Smart Quad-panel MIMO Technology

Generate more capacity with less interference! We introduces the first directional MIMO technology, providing 4 individual 90º panels that can uniquely transmit MIMO streams only in the direction of a desired client. This also frees up the access point to simultaneously transmit to an additional client in a different direction using game changing Multi-User MIMO technology.

Fiber Speed Access at a Fraction

With client speeds capable of 500 Mbps+, and access point capacity up to 1.5 Gbps delivers the speeds consumers and business users demand at a fraction of the cost of delivering Fiber to the Premises.

Beautifully Compact

Delivering leading performance in a tiny form factor, the 14 dBi makes any suburban rooftop or urban installation a fast, easy and discrete solution.
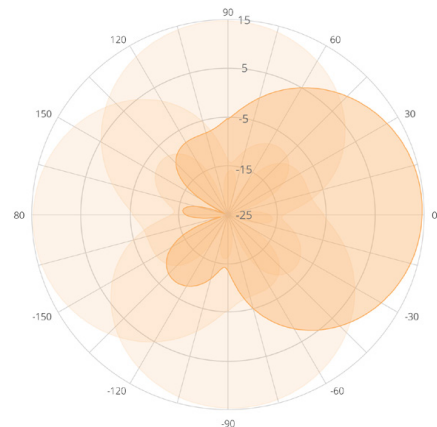
Application

Suburban and Urban wireless broadband

Municipal Licensed Public Safety multipoint (4.9 GHz)

Plot

Unparalled Access Point

IP67 Gigabit Point-to-Multipoint

Technical Specification	

Performance

Max Throughput	Up to 1.0 Gbps IP (1.7 Gbps PHY)
Client Capacity	100 Clients (WiFi Interop); 44 Clients (SRS)
Wireless Protocols	Wi-Fi Interop GPS Sync (TDMA)
Coverage Radius	Recommended < 300 m/1000 ft for optimal performance

Radio

MIMO & Modulation	MIMO & Modulation
Bandwidth*	20/40/80 MHz channels Tunable in 5 MHz increments with GPS Sync Tunable to standard WiFi channels for WiFi Interop
Frequency Range	GPS Sync: 4900-6400*** MHz WiFi Interop: 5170-5835 MHz Restricted by country of operation (*new* US/FCC 5600-5650 support)
Max Output Power	30 dBm
Sensitivity (MCS 0)	-87 dBm @ 80 MHz -90 dBm @ 40 MHz -93 dBm @ 20 MHz

Antenna

Gain	14 dBi (net of losses into each of four sector panels)
Beamwidth (3dB)	70º azimuth, 16º elevation
Front-to-Back Ratio	>30 dB
Cross-Polar Isolation	>20 dB or better
Polarization	Circular, four alternating panels

Power

Max Power Consumption	25 W
System Power Method	802.3at compliant
System Lightning & ESD Protection	6 kV
PoE Power Supply	802.3at and Passive PoE compliant, 48-56 V Power over Ethernet supply with IEC61000-4-5 surge Protection

Unparalled Access Point

IP67 Gigabit Point-to-Multipoint

Physical

Dimensions	Height: 314 mm (12.36")
	Width: 142 mm (5.61")
Weight	1.75 kg (3.85 lbs)
Enclosure Characteristics	Outdoor UV-stabilized engineered polymer
Wind Survivability	200 km/h (125 mph)

Environmental

Outdoor Ingress Protection Rating	IP67
Operating Temperature	-40°C to +55°C (-40°F to 131°F)
Operating Humidity	5 to 100% condensing
Operating Altitude	4420 m (14500') maximum
Shock & Vibration	ETS 300-019-2-4 class 4M5

Features

Gigabit Ethernet	10/100/1000BASE-T
Synchronization	GPS + GLONASS allows for network-wide sync and interference avoidance
Collocation	1PPS GPS Tx/Rx synchronization for same tower collocation and channel reuse
Network Processing	Advanced AP control for capacity and subscriber management
Access Control Lists	Permit, Deny and Remark Layer 2 and Layer 3 traffic flows
Traffic Shaping	Per CPE UL/DL commit and maximum rate shaping
Management Services	Cloud monitoring and management SNMPv2 & Syslog legacy monitoring HTTPS HTML5-based Web UI 2.4 GHz 802.11b/g/n radio for local management access ‡
Smart Spectrum Management	Active scan monitors/logs ongoing RF interference across channels (no service impact) Dynamic auto-optimization of channel and interference avoidance
Security	WPA2 + 802.1x RADIUS Future support of WPA2-Enterprise/HotSpot 2.0 Management VLAN support

Unparalled Access Point

IP67 Gigabit Point-to-Multipoint

QoS	Supports 4 pre-configured QoS levels
GPS Location	GNSS-1 (GPS + GLONASS)
VLANs	Per subscriber VLAN; Q-in-Q, triple tagging; Management VLAN

Regulatory + Compliance

Approvals	FCC Part 15.407 and Part 90Y, IC RSS210, CE, ETSI 301 893/302 502
RoHS Compliance	Yes
Safety	UL/EC/EN/ 60950-1 + CSA-22.2

Performance

Wind Loading	7.72 kg @ 160 km/h (17.03 lbs @ 100 mph)
Mounting	Dual pole strap feed points integrated into metal base with integrated curvature for contact with mounting poles.