StarAccess 2250 Wave 2.0

1.3 Gbps 2 x 2 Dual Band MU-MIMO Outdoor Long-Range Wi-Fi Access Point

OVERVIEW

StarAccess 2250 Wave 2.0 is a powerful cost-effective Access Points designed on latest MU (Multiuser) MIMO Wave 2.0 technology. It is focused on providing best in class capacity in terms of number of users, throughput and interference mitigation by several selective smart design concepts working in tandem.

It can cover small to medium area of high user density. Its Dual band operation in 2.4 GHz and 5.0 GHz makes it compatible with any age of end user devices. With functions like band steering and beamforming it always makes sure that user are connected to most appropriate frequency and hence get the best services.

With both bands combined StarAccess 2250 Wave 2.0 can deliver of high throughput rates of up to 1.3 Gbps per Access Point.

For connection into the network is a Gigabit Ethernet interface on the StarAccess AC 2250 Wave 2.0 can connect to a wired backbone.

EION StarAccess AC can be configured as a standalone access point, or as part of a group of APs managed by EION's Network Controller. With up to eight different SSIDs per AP, StarAccess AC products can form a powerful 3G/4G offload solution for service providers and enterprises.

The StarAccess AC 2350 base radio is packaged in an IP67 ruggedized enclosure is suitable for all weather conditions. The specialized design of the finned enclosure allows for stable operation in high heat environments while the integrated vent plug protects electronics in high humidity conditions. The thick all-metal enclosure provides high EMI immunity for stable operation and secures communications in hostile environments.

PRODUCT FEATURES

- Outdoor Wi-Fi AP supports dual-band operation in 2.4 GHz & 5.8 GHz

- Latest MU-MIMO Wave 2.0 technology

- Delivers powerful Wi-Fi performance for small and medium high user density and bandwidth hungry crowd.

- Beamforming

- 2 x 2 MU-MIMO Technology, up to 1.3 Gbps

- IEEE 802.11ac compliant and Backward compatible with 802.11a/b/g/n

- Supports IEEE 802.11d, e, h, I, k, r, v time stamp, and w standards

- Supports Dynamic Frequency

- 80, 40 & 20 MHz Channel Sizes

- NLOS Urban Coverage with OFDM Technology

- User Friendly Web-Based GUI

- Management from Central 1U mount EION Controller

- Captive Portal

- Zero Configuration or touchless configuration

- Rugged Construction for All Weather Conditions

- Built-in ESD Protection with ESD/EMP Immunity, Power Surge POE Protection.

ORDERING INFORMATION

9160-10-22-50	StarAccess AC 2250 Wave 2.0 2.4/5.8 GHz, 2x(2x2) MU-MIMO, Ruggedized, with 6 dBi OMNI Antenna Pack

RADIO SPECIFICATION

Topology	Standard Wireless LAN Topology (Multiple Modes Supported)
Frequency	2.4 GHz and 5.8 GHz (Dual-Band in a single enclosure)
Channel Size	20 MHz ; 40 MHz ; 80 MHz (5GHz Only)
Modulation	OFDM: BPSK, QPSK, 16-QAM, 64-QAM, 128 QAM (5 GHz only) and 256-QAM (5 GHz only)
Signaling Rate	Up to 1.3 Gbps
Connectors	Total 4 x N-Type (2 x N-Type for 2.4 GHz and 2x N-Type for 5 GHz)
Output Power	5GHz Up to + 23 dBm (aggregated 26 dBm), 2.4 GHz Up to + 26 dBm (aggregated 29 dBm), configurable in 1dB steps

Receiver Sensitivity (BER = 10^{-6}) +/- 2dB

5 GHz				2.4 GHz		
Modulation	20 MHz	40 MHz	80 MHz	Modulation	20 MHz	40 MHz
BPSK	-94 dBm	-91 dBm	-90 dBm	BPSK	-94 dBm	-93 dBm
16-QAM	-82 dBm	-79 dBm	-76 dBm	16-QAM	-84 dBm	-82 dBm
64-QAM	-70 dBm	-67 dBm	-64 dBm	64-QAM	-75 dBm	-68 dBm
256-QAM	NA	-85 dBm	-58 dBm	256-QAM	NA	NA

Duplexing Format	Dynamic Time Division Duplex (TDD), Half-Duplex
Medium Access Control	IEEE 802.11ac/abgn
Data Rate Selection	Dynamic Adaptive Modulation per Link

NETWORK SPECIFICATIONS

Network Connection	Gigabit Ethernet port; Auto MDI-X RJ45 10/100/1000 Mbps Ethernet
Operational Mode	Transparent Bridging (per OSI Layer2), Multicast
Traffic Management	Advanced QoS per user (Hotspot Mode), Standard WMM
MAC Filtering and Firewall	Filtering through Standard MAC address, Firewalls – Zones
VLAN	Data Tagging/Untagging, VLAN Management
NAT	1 : N NAT configurable through CPE GUI/Controller
DHCP	DHCP Client , DHCP server for LAN devices when in NAT mode, PPPoE, L2TP
Ipv6	Ipv6 pass through in bridge mode
Routes	Add static Routes
Operation Mode	Standalone, Hotspot, EION AP Controller
Enhanced Control	- Hotspot and Guest Portal Support - Powerful Network Diagnostic Utilities

SECURITY

Management Access	Username and Password Compatible with all modern web browsers and Windows 7+ OS
Encryption	WEP (64, 128, 154), WPA1 (TKIP), WPA2 (CCMP – AES 128, CBC-MAC for headers).

MANAGEMENT

Management Access	Over the Air & Wired over prioritized ports
Remote Monitoring	HTML Web-GUI, SNMP, EION Network Controller provides touchless configuration and management of all the Access Points in the network

Installation Management	• Real-Time Link Quality Metrics • Built-in Spectrum Analyzer • See connected users on the AP or the Controller
Backup Configuration	Save Radio Configuration to local PC or Configure via Controller
Software Upgrade	Over the Air or local, Web-based upgrade
Services	Auto Reboot, Ping Watchdog

PHYSICAL, ELECTRICAL & ENVIRONMENTAL

Power Consumption	Typ. < 10 Watts
Power Supply	100-240V, 50/60 Hz AC; UL/CSA approved 48 Volt POE system; DC power options available. The included power supply includes one standard Gigabit Ethernet port for connection to LAN or local PC, and one PoE port for connection to the StarAccess equipment. Power supply is 10/100/1000 BaseT IEEE802.3af/at complaint with data rates up to 1 Gbps full duplex on both ports
Temperature Range	Operating: -20º C to +70º C Storage: -40º C to +90º C
Relative Humidity	Operating: 0% to 100% (condensing); Storage: Max. 90% (non-condensing)
Mounting Bracket	Pole mounting hardware included
Enclosure	Single Unit, Die Cast Metal NEMA 4x; IP67, Finned for heat dissipation
Weight	2.2 kg
Dimensions	183 mm × 183 mm × 43 mm
Lightning Protection	Integrated, Telcordia GR-1089 compliant (Meets IEC 61000-4-2/ 4-4)

STANDARDS COMPLIANCE

Weatherproofing	IP67 when properly installed
Materials Compliance	RoHS/WEEE
Certification	CE, FCC & IC modular approvals

BOX CONTENTS

Each Box Contains the following items	• StarAccess AC 2250 Wave 2.0 2 x 2 MU-MIMO Radio • 4 x OMNI Antenna Kit • 48V PoE Injector with Power Cord • Pole mounting bracket • Quick Start Guide