

# StarAccess AC 3 x 3 Indoor

1.3 Gbps 3 x 3 MU-MIMO Wave-2 AC Dual Band Indoor Wi-Fi Access Point with Mesh



## OVERVIEW

StarAccess AC Indoor offers 3x3 MU-MIMO latest 802.11ac/a/b/g/n Wave-2 technology with smart antenna to provide excellent coverage and capacity. It is concurrent dual-band 2.4/5GHz WiFi Access Point with Mesh Capabilities that provides best in class Indoor WiFi coverage at signaling rates up to 1.3 Gbps and 450 Mbps on 2.4 GHz. StarAccess Indoor is designed for medium to large areas requiring Indoor WiFi coverage.

The StarAccess AC Indoor has significantly higher capacity and increased coverage capabilities over conventional Wi-Fi Access Points due to a number of factors working in concert. These factors are the latest MU technology, Smart Antenna which provides minimum to no null coverage spots (see details in antenna section) MIMO diversity advantage; good output power and enhanced sensitive receive capability.

For connection into the network the two Gigabit Ethernet interfaces on the StarAccess AC Indoor 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.

## PRODUCT FEATURES

- Indoor MU-MIMO 802.11ac/a/b/g/n Wi-Fi AP supports dual-band operation in 2.4 GHz & 5.8 GHz (Wave-2)
- Mesh Capability
- Beamforming
- 3 x 3 MIMO Technology, up to 1.3 Gbps and 450 Mbps on 2.4 GHz
- IEEE 802.11ac compliant and Backward compatible with 802.11a/b/g/n
- Supports Spatial Multiplexing, Cyclic-Delay Diversity (CDD), Low-Density Parity Check (LDPC) Codes, Maximal Ratio Combining (MRC), Space Time Block Code (STBC)
- Real Time Network Load Graphs
- Supports IEEE 802.11d, e, h, i, k, r, v time stamp, and w standards
- Supports Dynamic Frequency Selection (DFS)
- 80, 40 & 20 MHz Channel Sizes
- Watchdog Timer
- User Friendly Web-Based GUI
- SNMPv3 and Enterprise MIB for Advanced Network Management
- High Spectral Efficiency and Robust RF Network Performance

## ORDERING INFORMATION

9170-00-33-20	StarAccess MU-MIMO AC Dual Band, OFDM 3 x 3 MIMO, Smart Integrated Antenna, Dual Gigabit
9170-00-22-30	StarAccess MU-MIMO AC Dual Band, OFDM 2 x 2 MIMO, Smart Integrated Antenna, Dual Gigabit

## RADIO SPECIFICATION

Topology	Standard Wireless LAN Topology (Multiple Modes Supported); Mesh Cloud						
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 and 256-QAM						
Signaling Rate	Up to 1.3 Gbps on 5 GHz and 450 Mbps for 2.4 GHz						
Integrated Antenna	4dBi@2.4GHz pyramidal omni smart antenna, 5dBi @ 5GHz pyramidal omni smart antenna						
Output Power	5GHz Up to + 21 dBm (aggregated 26 dBm), 2.4 GHz Up to + 23 dBm (aggregated 28 dBm), configurable in 1dB step						
Receiver Sensitivity (BER = 10 <sup>-6</sup> ) +/- 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	-72 dBm
	256-QAM	NA	-65 dBm	-61 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	2 x Gigabit Ethernet ports ; 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/Un-tagging, 802.1q transparency, VLAN Management; SSID to VLAN Mapping
NAT	1:N NAT configurable through CPE GUI
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 CNMS (Centralized Network Management System)
Enhanced Control	<ul style="list-style-type: none"> <li>- Hotspot and Guest Portal Support</li> <li>- Powerful Network Diagnostic Utilities</li> <li>- Real-time Network Load Graphs</li> </ul>

## 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 v3c (Set, Get and Traps with proprietary MIB) MIB files are available on request
Installation Management	Wireless Link Monitor and Diagnostic Tool; <ul style="list-style-type: none"> <li>• Provides noise and RSSI signal levels as well as other statistical information</li> <li>• Real-time view of available over the air bandwidth</li> <li>• Real-Time Link Quality Metrics</li> <li>• Built-in Spectrum Analyzer</li> </ul>
Backup Configuration	Save Radio Configuration to local PC
Software Upgrade	Over the Air or local, Web-based upgrade
Services	Auto Reboot, Ping Watchdog

### PHYSICAL, ELECTRICAL & ENVIRONMENTAL

Power Consumption	Typ. < 14 Watts
Power Supply	100-240V, 50/60 Hz AC; UL/CSA approved 48 Volt POE system; DC power Jack (12V to 24V). The included power supply includes one standard 24V DC adaptor.
Temperature Range	Operating: -20° C to +70° C Storage: -40° C to +90° C
Relative Humidity	Operating: 0% to 100% (condensing); Storage: Max. 90% (non-condensing)
Mounting Bracket	Supports Wall-Mounted or Ceiling Mounted
Weight	Carton Box 8 Units – 6 Kg
Dimensions	Carton Box 8 Units – 422 x 410 x 240 mm
Lightning Protection	Integrated, Telcordia GR-1089 compliant (Meets IEC 61000-4-2/ 4-4)

### STANDARDS COMPLIANCE

Materials Compliance	RoHS/WEEE
Certification	CE, FCC & IC modular approvals

### BOX CONTENTS

Each Box Contains the following items	<ul style="list-style-type: none"> <li>• StarAccess AC Indoor 3 x 3 MU-MIMO Access Point</li> <li>• 24V PoE Injector</li> <li>• Quick Start Guide</li> </ul>
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### INTEGRATED ANTENNA PATTERNS

