

Access/One® Network 5400 Series

Extreme Bandwidth – Low Cost Alternative to Cabled Solutions

Using up to 3x3 antennas¹, multiple spatial streams, and Multiple Input, Multiple Output (MIMO) techniques, wireless mesh infrastructure from Strix Systems provides blistering fast throughput and a cost effective alternative approach to terrestrial-based networks such as Fiber. No matter what type of customer or vertical market, Strix can exponentially reduce CapEx and OpEx, which is critical to today's growing demands for network connectivity, retrofit or new expansion, and migration to new applications for enhanced services and efficiencies.

Extreme Capacity and Performance

The Access/One® Network (A1N) 5400 indoor wireless solution with 3x3 MIMO provides blistering fast throughput at up to 300 Mbps and built for extreme capacity. It supports multiple radio frequencies (2.4 GHz, 4.9 GHz, 5 GHz) concurrently from each unit and is uniquely designed for simultaneous support of multiple applications, VLAN segmented networks, real-time and low latency voice, and high resolution video applications and services.

Extreme Architecture

Strix's foundational architecture from its inception has clearly distinct advantages over other wireless solutions. It is a true dedicated multi-radio Layer 2 switching wireless mesh backbone providing near full duplex RX and TX and it also combines dedicated client access – all simultaneously from each unit. This provides exponentially greater sustainable throughput and lower latency over multiple hops compared to other A/G/N solutions that employ a store and forward single radio for backhaul, which results in high latency and 50% or greater degradation of available bandwidth and high latency. The A1N5400 can also be wired directly to the network for multiple radio access.

Easier Large Scale Deployments & Network Management

The A1N5400 automatically self forms, self configures and self heals forming an instantaneous and highly redundant wireless mesh network infrastructure and helps lower deployment and operational expenditures. Its proven multi-radio and Layer 2 switching architecture enables unlimited scalability and rapid deployment of thousands of mesh nodes. Centralized provisioning and monitoring allow instant availability.

Failover & Reliability

The A1N5400 enables network communication with each other and performs intelligent tasks and analysis, ensuring that the network's performance is always at its peak. But if problems do arise, the system has the intelligent ability to "tune" and "heal" itself instead of breaking down. There's no single point of failure. Each unit is fully aware of its neighbor and, in the event of an adjacent unit's failure, overload, or network cable cut of a wire terminated unit, it will redirect traffic. Customers can now benefit from a wireless system that satisfies network-wide reliability.

Mobility & Roaming

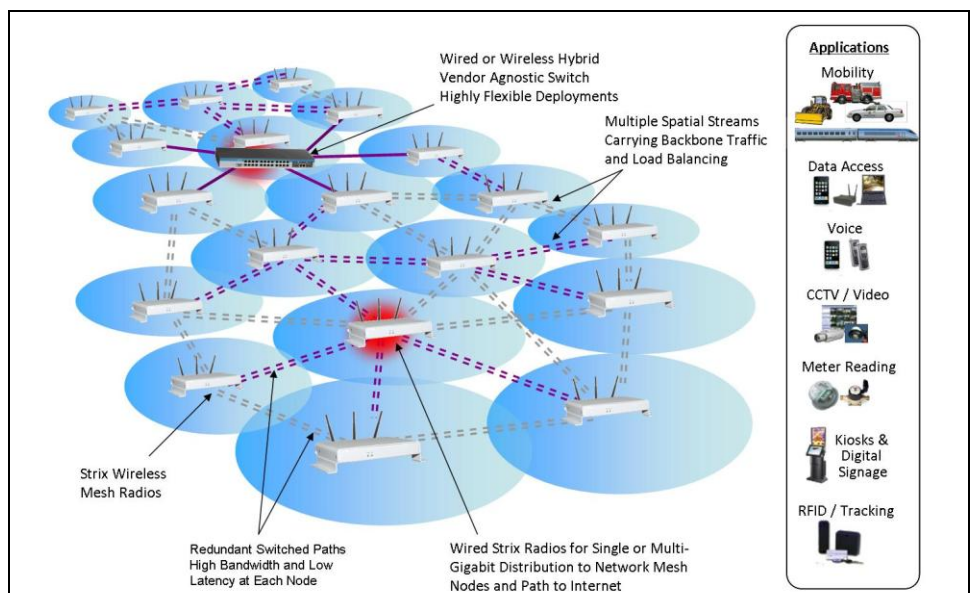
Strix Access/One solutions are capable of supporting mobile data and VoIP roaming and handoffs seamlessly. The multi-radio Layer 2 switching architecture and highly tunable mobile parameters enable blistering fast mobile roaming and session persistence. Any 802.11 compliant device is supported allowing roaming between indoor and outdoor wireless networks.

Security & Optimization

The A1N5400 offers the industry's highest level of security available, which includes 256-bit AES encryption, FIPS 140-2 and 197 certification and mesh-wide private traffic isolation. It also offers enhanced optimization parameters: QoS traffic provisioning, multicast traffic efficiency handling, weak client handling, mobility roaming, power save queuing, antenna alignment, and throughput testing.

Applications

Fixed and mobile, video surveillance, VoIP, mobile, logistics, industrial, Wi-Fi access, telemetry, RFID, access control, sensors, digital signage, etc.



Technical Specifications

Models

- ✗ A1N5412 – 1G/N
- ✗ A1N5422 – 1G/N, 1A/N/J/4.9
- ✗ A1N5432 – 1G/N, 2A/N/J/4.9

Mesh Protocol

- ✗ Strix Dynamic Mesh Architecture™
- ✗ Scalable Mesh Fast Re-Route™
- ✗ High Performance Modular Architecture™

Security & Encryption

- ✗ Authentication
 - ✗ 802.1x support, RADIUS – Up to 2 RADIUS servers per BSSID
 - ✗ RADIUS Client Functionality
 - ✗ EAP-MD5, TLS, TTLS, PEAP
 - ✗ WPA/WPA2, Enterprise and PSK
 - ✗ Access Control Lists
 - ✗ Strix Access/One
- ✗ Encryption:
 - ✗ Backhaul: AES CCM
 - ✗ Client: AES, TKIP and WEP
 - ✗ 64, 128, 256 bit
 - ✗ Password Encryption
- ✗ Trusted Inventory Authentication
- ✗ Trusted IP Management Access
- ✗ RADIUS Management User Accounts
- ✗ Mesh-wide Layer 2 Traffic Isolation
- ✗ Rogue Device Detection
- ✗ SSID Suppression

Traffic Prioritization & QoS

- ✗ 802.11e WMM
- ✗ Class of Service 802.1p
- ✗ 802.1q VLAN Queuing
- ✗ DiffServ
- ✗ VLAN, TOS Bit, IP Protocol, UDP/TCP Ports

Software Features

- ✗ 16 BSSIDs per radio
- ✗ 250 VLANs per radio, Up to 4096
- ✗ Single and Multi-VLANs per BSSID
- ✗ Multi-Radios for dedicated mesh backhaul and client access
- ✗ Load Balancing and Auto Failover
- ✗ Session-Persistent Mobility
- ✗ Location Based Services
- ✗ Multicast Efficiency Handling
- ✗ Dynamic Auto Channel Select
- ✗ Weak Client Trigger Handling
- ✗ Power Save Packet Queuing
- ✗ Clear Channel Assessment
- ✗ Integrated Performance Test Utility



Wireless Interface

- ✗ Wireless Standards – G/A/N/J/4.9
- ✗ Up to 3x3 MIMO
- ✗ Frequency Bands:
 - 802.11G/N
 - ✗ 2.4 - 2.462 GHz (Americas, FCC)
 - ✗ 2.4 - 2.472 GHz (Europe, ETSI)
 - ✗ 2.4 - 2.497 GHz (Japan, MKK)
 - 802.11A/N
 - ✗ 5.15 - 5.25 GHz
 - ✗ 5.25 - 5.35 GHz
 - ✗ 5.470 - 5.725 GHz
 - ✗ 5.725 - 5.850 GHz
 - 802.11J/4.9
 - ✗ 4.94 – 4.99 GHz (USA)
 - ✗ 4.92 – 5.08 GHz (Japan)
- ✗ Receiver Sensitivity Rates (Mbps)
 - ✗ -68 dBm HT40 @ Up to 300 Mbps
 - ✗ -68 dBm HT20 @ Up to 150 Mbps
 - ✗ -74 dBm @ 54 Mbps
 - ✗ -91 dBm @ 11 Mbps
- ✗ Transmit Power
 - ✗ Up to 23 dBm²
 - ✗ Transmit Power Control
- ✗ Modulations
 - ✗ 802.11a: 16- QAM, 64- QAM, QPSK, BPSK
 - ✗ 802.11b: CCK, DQPSK, DBPSK
 - ✗ 802.11g: 16-QAM, 64-QAM, QPSK, BPSK
 - ✗ 802.11n: 16-QAM, 64-QAM, QPSK, BPSK
- ✗ Supported Channel Widths
 - ✗ 5, 10, 20, and 40 MHz
- ✗ Dynamic Frequency Selection

Network Interface

- ✗ Four GigE 10/100/1000 Mbps Ethernet ports
- ✗ GigE switched interface backplane
- ✗ IEEE 802.3, 802.3u compliant
- ✗ CSMA/CD 10/100 autosense
- ✗ Power Over Ethernet, 802.3af
- ✗ DHCP, DHCP Relay, Static IP

Management Software

- ✗ Centralized Provisioning and Monitoring
- ✗ Topology and Mapping
- ✗ Inventory Management
- ✗ HTTP/HTTPS – WEB GUI configuration
- ✗ Telnet/SSH – CLI Interface
- ✗ Device Discovery and Auto Backhaul
- ✗ Remote Management
- ✗ SNMP – 802.11 and Strix MIBs
- ✗ Syslog

Electrical

- ✗ AC Input: Auto-sensing 100-240 VAC, 50/60 Hz
- ✗ DC Input: 12V, 2A
- ✗ AC Power Consumption: Up to 20W
- ✗ Power Over Ethernet, 802.3af

Environmental

- ✗ Operating Temperature: 0°C to +40°C
- ✗ Storage Temperature: -20°C to 70°C
- ✗ Humidity: 95% Non-condensing

Physical

- ✗ Dimension (mm): 241W x 51H x 152D
- ✗ Weight: 680g
- ✗ Operating Temperature: 0°C to 40°C
- ✗ Storage Temperature: -20°C to 70°C
- ✗ Humidity: 95% Non-condensing
- ✗ Connectors: 6 antenna, 1 power, 4 Ethernet (RJ-45)
- ✗ Ethernet port LEDs (link, status, activity)
- ✗ System LEDs (power, status)
- ✗ Reset button
- ✗ Plenum-rated UL2043

Options and Accessories

- ✗ Ceiling-Mount, Wall-Mount, Desktop

Warranty

- ✗ 13 Months Hardware and Software
- ✗ Extended Warranties Available

¹ Multiple Configurations Available

² Transmit power varies by country