Outdoor Wireless System

Delivering a structured wireless mesh to unleash the power of Metro Wi-Fi
**Networks Without Wires®**

*Strix OWS offers high bandwidth and low latency across multiple hops, ideal for exchanging real-time voice and video data across large scale multi-use Metropolitan area networks.*

Unlike traditional access points that offer limited coverage within predefined hot spots, or single radio/single RF mesh solutions that won’t scale, Access/One Network OWS provisions wireless hot zones that can extend over hundreds of square miles. Not an access point, but a fully integrated and coherent wireless network infrastructure that delivers intelligence, scalability, security and unrivaled performance to the outdoor environment.

Access/One Network OWS can be located, relocated, scaled up or scaled down—all at minimal cost and with virtually no disruption to services, providing a reliable and truly flexible Network Without Wires®.

**What to look for when choosing a mesh network**

- ✔ Can it scale without adding large numbers of wired drops?
- ✔ Can it support real-time communications, like voice and video?
- ✔ Can it deliver capacity across the mesh, even to the nodes at the edge?
- ✔ Is it a mixed use network, supporting different types of traffic and different classes of users, while carrying security schemes and definable levels of prioritization?
- ✔ Is it self-configuring, self tuning, and self-healing?
- ✔ Is it manageable and secure?
- ✔ Does it support flexible deployment options, including antenna types and mounting choices?
- ✔ Do the mesh nodes support mesh backbones that utilize dedicated radios operating in different spectrums from the client access radios?

Access/One Network OWS is deployed at locations that require extended range, power and versatility for both users and service providers. For example:

- WISPs, for public access networks.
- City governments, for public safety and transportation networks, or as a service to residents.
- WISPs and city governments, for mixed use public and private access networks.
- Carriers, for extending or augmenting their existing infrastructure.
- Educational Institutions to provide campus-wide broadband network access.

*Multi-Radio, Multi-RF, Multi-Channel, and Multi-Use*
Access/One Network OWS provides multi-radio, multi-RF and multi-channel capacity with the most efficient algorithms, creating high performance mesh networks capable of delivering the required throughput over multiple hops to the edge of the network.

The multi-radio and multi-hop capability forms an intelligent high performance mesh, where traffic is routed on optimal paths and the mesh automatically self-tunes and self-heals as conditions change. System intelligence is distributed throughout the mesh network, with security parameters, monitoring rules and system upgrades managed conveniently from one central location. This combination of distributed intelligence and centralized management harnesses the full power of wireless networking and delivers a total system solution that is reliable, efficient, and secure.

Low latency and high performance over multiple hops to the edge of the network.
Key Features and Benefits

- **Up to 6 radios per node.**
  Individual radios serve unique purposes in a node—ingress or egress in the mesh backbone, or to serve clients.
  **Benefit:** Better performance across the entire network, with the ability to support more users per node, and fewer nodes required per square mile.

- **Multiple channels in the mesh.**
  The mesh backbones can be built on separate channels amongst nodes to address interference issues.
  **Benefit:** Overall network performance is not impacted by interference in any part of the wireless network.

- **Multiple RF support.**
  All 802.11 technologies can be supported from Strix OWS nodes.
  **Benefit:** Different spectrums can be used for the mesh backbones and for the clients, minimizing interference issues and maximizing the network's performance.

- **Multi-use network support with QoS.**
  Virtual/Strix and Priority/One support deployments of mixed use networks where varying security schemes are implemented based on user type (for example, public safety versus public access), and different levels of priority can be assigned to the various network traffic.
  **Benefit:** Networks can serve multiple purposes, eliminating the expense of deploying multiple networks—with the appropriate types of traffic receiving priority, and the integrity of the data remaining secure.

- **High multi-hop capabilities.**
  Ability to multi-hop traffic throughout the network without degrading performance.
  **Benefit:** Minimizes the cost of ongoing network operations, and reduces the complexity of network planning and design associated with too many wired drops in the network.

- **Voice, video, and data support.**
  Low latency with high performance mesh backbones that can support multiple types of traffic.
  **Benefit:** Real-time voice and video applications can be run on the mesh, increasing the overall usefulness of the network.

Strix Systems is a leading innovator of structured wireless mesh technology, and unlike some access point products that are scrambling to join the mesh community, Access/One Network OWS was purposely developed with mesh in mind—not an afterthought and not a product, but an intelligent, self-governing system.

“mesh: the space or interstice between the threads of a net.”

*New English Dictionary, March 1932*