# **Access Networks ANX 7150**

**Enterprise-Class Stackable Switches** 



# **SALES GUIDE**



# **BENEFITS**

#### STACKABILITY SIMPLIFIES MANAGEMENT

- Class-leading stacking scalability with up to 12 switches per stack
- Long-distance stacking up to 10 km using standard optics or cables

# EASILY INTEGRATES INTO ANY CUSTOM CORE SYSTEM

 Add ANX Switches to any preexisting Core system as it scales

# 10 GbE PORTS OPTIMIZE NETWORK PERFORMANCE

• Up to 8×10 GbE SFP+ ports for stacking or uplinks

# DUAL POWER SUPPLIES FOR HIGH AVAILABILITY

 Dual load-sharing, hot-swappable power supplies available on the Z-Series switch

# MULTIGIGABIT SUPPORT ENABLES NEXT GENERATION WIRELESS DEPLOYMENT

 Up to 16x 2.5 GbE ports optimized for Wi-Fi 5 and 6 deployment

# CLASS LEADING POE BUDGET TO POWER ADVANCED EDGE DEVICES

- PoE+/PoH/802.3bt budget (up to 1,480 watts)¹
- Support advanced wireless APs and video surveillance equipment

# SILENT OPERATION FOR DEPLOYMENT IN THE WORK ENVIRONMENT

 Fanless design or fanless mode enables silent nondisruptive deployment anywhere

### **ADVANCED L3 MAXIMIZES FLEXIBLITY**

OSPF, VRRP, PIM, PBR L3 features

# ACCESS NETWORKS SWITCH SERIES DELIVERS UNPRECEDENTED PERFORMANCE AND FEATURES IN ITS CLASS

The Access Networks ANX 7150 series of stackable switches delivers the performance, flexibility, and scalability required for enterprise access deployment, raising the bar with non-blocking performance and up to 8x10 GbE ports for uplinks or stacking. It offers seamless interoperability with Access Networks wireless products to deliver unified wired and wireless network access. In addition, Access Networks Multigigabit Ethernet technology offers bandwidth speeds needed to optimize performance of the latest generation high performance wireless access points and edge devices, over standard Ethernet cables.

The Access Networks ANX 7150 series of switches are available in three formats:

## **ACCESS NETWORKS ANX 7150 SWITCHES**



The standard Access Networks ANX 7150 switches are available in 24-, and 48-port 10/100/1000 Mbps models with four 1/10 GbE dual-purpose uplink/stacking ports. These switches are available with or without PoE+ power. Silent operation is available for noise sensitive environments.

## **ACCESS NETWORKS ANX 7150 Z-SERIES SWITCH**



The Access Networks ANX 7150-48ZP 48-port switch adds higher performance, greater resiliency and increased PoE power. The switch offers Multigigabit technology (IEEE 802.3bz) to match the highest performing 802.11ac Wave 2 wireless access points available, with dual redundant, hot-swappable power supplies and fans, and up to 8x10 GbE uplink/stacking ports.

The switch offers 16 Multigigabit (100Mbps/1Gbps/2.5Gbps) ports, each with Power-over-HDBaseT (PoH) up to 90 watts and 802.3bt ready, plus 32 10/100/1000 Mbps ports with PoE+. With a maximum PoE budget of 1480 watts, this switch delivers the power, and performance, to drive PoE+ power to all 48 ports.

## ACCESS NETWORKS ANX 7150 COMPACT SWITCH



The Access Networks ANX 7150 compact switch come in 12 ports and feature a fanless design to operate silently in out-of-closet environments. They offer PoE on all ports. With 2x1/10 GbE uplink/stacking ports, the ANX 7150-C12P delivers high performance in a small package.

Figure 1: Up to 12 Access Networks ANX 7150 Switches can be stacked together using up to four SFP+ 10 Gbps ports per switch for a fully redundant backplane delivering 480 Gbps of aggregated stacking bandwidth.

4x 10G Uplinks

## STACKING ACROSS THE ANX 7150 SERIES

Access Networks stacking technology makes it possible to stack up to twelve Access Networks ANX 7150 switches into a single logical switch. This allows the Access Networks ANX 7150 to deliver a class-leading 480 Gbps of aggregated stacking bandwidth and offer simple and robust expandability for future growth. Stacking is supported across the ANX 7150 series and all ANX 7150 models including the ANX 7150 compact switches and the ANX 7150-48ZP can be mixed within the same stack. This stacked switch has only a single IP address that simplifies management and offers transparent forwarding across up to 600×1 GbE ports or up to 192×2.5 GbE ports, and up to 96×10 GbE ports. When new switches join the stack, they automatically inherit the stack's existing configuration file, enabling a plug-and-play network expansion.

Because the ANX 7150-48ZP switch has twice as many uplink ports, when it is added to a stack of other ANX 7150 switch models, the effective bandwidth of all the switches is doubled. By designing the stack this way, all four of the 10GbE ports on the ANX 7150 switches can be used for stacking (rather than having to split the four ports between stacking and uplinks), and leveraging four of the 10GbE ports on the ANX 7150-48ZP for stacking and the other four 10GbE ports can be used for uplinks.

#### **ENTERPRISE-CLASS AVAILABILITY**

The Access Networks ANX 7150 Switches help deliver continuous availability to optimize the user experience. Access Networks stacking technology provides high availability by performing real-time state synchronization across the stack and transferring switch management control from the master stack controller to the standby controller if the master stack controller experiences a failure. When hot-inserting or hot-removing a stack member to increase capacity or perform service upgrade, traffic flows will not experience interruption.

In addition to stack-level high availability, Access Networks ANX 7150 Switches also support stack level ISSU (In Service Software Upgrade), a unique capability that allows the user to perform software upgrades to a Access Networks ANX 7150 stack without service interruption. Taking high-availability and reliability even further, the Access Networks ANX 7150 Z-Series switch offers redundant hot swappable load sharing power supplies and up to 2 hot swappable fans.

#### SILENT OPERATION

The Access Networks ANX 7150 compact switch, along with the Access Networks ANX 7150-24 and the ANX 7150-48 switches, feature a fanless design that enables it to operate silently.

The Access Networks ANX 7150-24P and the ANX 7150-48P offer a "silent mode" configuration option, enabling these switches to operate with the fan disabled while providing a PoE budget of 150 watts. This Access Networks-exclusive feature enables users in residential, hospitality and retail industries to deploy these switches outside of the wiring closet without disrupting the work environment.

#### MULTIGIGABIT ETHERNET SUPPORT

The Access Networks ANX 7150-48ZP Switch raises the bar for en-trylevel switches even further with 16x IEEE 802.3bz compliant 2.5 GbE ports, up to 8×10 GbE uplink ports, dual redundant load sharing power supplies and class-leading stacking density with up to 12 switches per stack. This switch will stack with all other members of the ANX 7150 series allowing organizations to buy what they need now and easily scale as the need for Multigigabit support emerges. It is designed to work seamlessly with Access Networks wireless access points to deliver unified wired and wireless network access.

#### POWER NEXT-GENERATION EDGE DEVICES

All ANX 7150 series members offer PoE options. The compact 12 port switch delivers PoE+ on all ports with a 124W PoE budget. The 24- and 48-port ANX 7150 switches offer up to 740W of PoE+ power and the ANX 7150 Z-Series offers an industry leading 1480W PoE budget when equipped with 2 power supplies. In addition to supporting PoE and PoE+, the Access Networks ANX 7150 Z-Series also offers Power over HDBaseT (PoH) and is 802.3bt ready. This new, high power standard delivers up to 90 watts per port through a standard Ethernet cable, simplifying the wiring of next-generation Ethernet-connected devices such as high-performance wireless APs, large HD displays, video surveillance equipment, and enabling data and power to be carried by a single Ethernet wire. The PoE, PoE+ and PoH capabilities reduce the number of required power receptacles and power adapters while increasing reliability and wiring flexibility.

With a 1,480-watt power budget per switch (with two power supplies), the Access Networks ANX 7150 48ZP model can supply Class 4 PoE+ power (30 watts) to every port and PoH 802.3bt ready power (90 watts) on 16 dedicated Multigigabit ports.

<sup>&</sup>lt;sup>1</sup> Up to 90W per port, IEEE 802.3bt support pending software update. Compatible with uPoE.

# **ENTERPRISE-CLASS FEATURES ACROSS ACCESS NETWORKS ANX SWITCHES**

Access Networks ANX switch family delivers the enterprise class features for flexibility, scalability and simplified management.

- Enterprise-Class Availability to improve resiliency and minimize downtime, including:
  - Hitless stack failover
  - Hot-insertion/removal of stack members
  - Redundant power supplies
  - In Service Software Upgrades for switch stacks
- Unified wired and wireless network management with SmartZone network controller:
  - SmartZone centralizes management of the entire family of Access Networks switches and wireless access points with a single easy to deploy management platform
    - Discovers, monitor, and deploys configurations to groups of switches and wireless APs
- On-boarding and security policies across ANX switches and wireless networks
- OpenFlow 1.3 protocol\* support in hybrid mode allows user to deploy traditional Layer 2/3 forwarding with OpenFlow on the same port for Software Defined Network (SDN) enabled programmatic control of the network
- Open Standards based management, monitoring and authentication
  - sFlow-based network monitoring to help analyze traffic statistics and trends on every link and overcome unexpected network congestion
  - Open-standards management includes Command Line Interface (CLI), Secure Shell (SSHv2), Secure Copy (SCP), and SNMPv3
  - Support for Access Controller Access Control System (TACACS/TACACS+) and RADIUS authentication helps ensure secure operator access
  - LLDP and LLDP-MED protocol support for configuring, discovering, and managing network infrastructure such as QoS, security policies, VLAN assignments, PoE power levels, and service priorities

#### **ORDERING NOTES**

All Access Networks ANX 7150 switches come with an accessory kit that includes a rubber foot kit, power cord clip, rack mount kit (for 24/48 ports model), RJ-45 console cable and US AC power cord. Stacking cables, USB console cables, compact switch rack mount kit, and optics need to be ordered separately.

All Access Networks ANX 7150 switch models with 1 GbE SFP uplink ports can be upgraded to 10 GbE SFP+ ports with a license.

Standard Access Networks ANX 7150 1 RU Switch models can be ordered configured with either  $4\times1$  GbE SFP,  $2\times1$  GbE SFP, and  $2\times10$  GbE SFP+, or  $4\times10$  GbE SFP+ uplinks.

The Access Networks ANX7150-C12P compact switch can be ordered configured with either 2×1 GbE SFP or 2×10 GbE SFP+ uplinks.

The Access Networks ANX7150-48ZP switch can be ordered configured with 2×10 GbE SFP+ uplinks and 6×1 GbE SFP, or 8×10 GbE SFP+ uplinks.

Upgrade licenses are available to upgrade standard Access Networks ANX 7150 1 RU switches to either 2×1 GbE SFP and 2×10 GbE SFP+ or to 4×10 GbE SFP+, the Access Networks ANX 7150 compact switch to 2×10 GbE SFP+, and the Access Networks ANX7150-48ZP switch to 8×10 GbE SFP+.

Access Networks ANX 7150 Switches with 4×10 GbE SFP+ and 8×10 GbE SFP+ (2×10 GbE SFP+ for the compact switch) include a license to enable Layer 3 features (OSPF, VRRP, PIM, PBR).

Contact Access Networks or channel partner representative for details about Access Networks support options and support part numbers.

For your convenience, a fully loaded ANX 7150-48ZP model with dual power supplies and  $8\times10$  GbE ports bundle has been created. It comes with factory installed power supplies, fans and  $8\times10$  GbE port licenses.

## **WARRANTY**

Access Networks ANX 7150 Switches are covered by the Access Networks Four Year Warranty, the first year includes advanced hardware replacement.

#### **BEST-IN-CLASS SUPPORT**

Access Networks will provide Layer 2 (Switch image) network feature support during normal support hours. This support will include troubleshooting and hardware support with product replacement for a period of 4 years, advanced hardware replacement is included for the first year, and standard return to factory replacement is included during years two through four.

Please note that Layer 3 (Router image) or multi-VLAN support is only available as part of a Core3 network system.

## LEGAL DISCLAIMER

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