

airPoint XO

with built-in Bandwidth Management



- Bandwidth Management for high QoS
- Built-in RADIUS client for authentication and individual user SLA
- Independant upload/download control for each user
- Internal MAC table list for small networks
- Supports more clients per Access Point

Bandwidth Management

- Roaming support by external RADIUS control
- Seamless operation in PPPoE networks
- SNMP Access to MAC forwarding tables
- Access control list and IP filters for SNMP requests
- Advanced traffic statistics

Advanced Networking

- Powered by IEEE 802.3af compliant PoE Outdoor
- Surge suppression
- Regulatory compliant installations
- Weatherproof, rugged thermal design in NEMA4X enclosure
- Device Temperature monitoring by SNMP
- Dedicated Network Processor for secure device management

Carrier Class Reliability

- Access Point mode for Wireless PoPs
- Wireless Bridge Mode for Backhails
- Client-Bridge mode for extended coverage

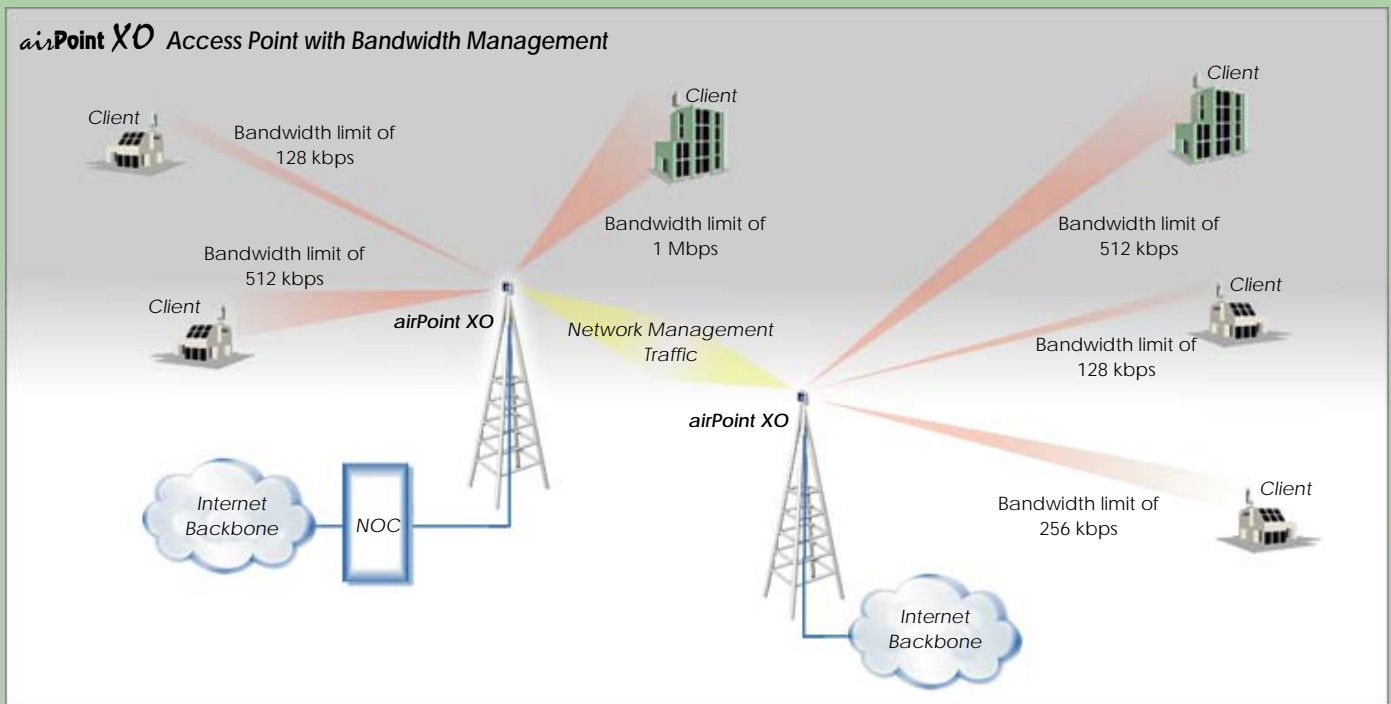
Flexible Configurations

airPoint XO

The smartBridges airPoint XO is a LongRange™ IEEE 802.11b compliant professional access point with built-in bandwidth management. It distributes bandwidth control function over the network, thus improving performance and robustness of Wireless Wide Area Networks (WWANS). The airPoint XO manages network traffic data to allow optimal bandwidth allocation, pricing and customer management. With remote management features, carrier class protection and standards compliance, the airPoint XO lends Wireless ISPs (WISPs) the unique capability to manage wireless networks effortlessly and profitably.

Bandwidth Management for increased ROI

The airPoint XO provides bandwidth throttling of upload/download streams. The bandwidth control can be done using static tables or dynamically by RADIUS, along with authentication. The Wireless ISP can profile subscribers based on speed limits and identify bandwidth usage patterns. This opens up customer segmentation possibilities, leading to revenue maximization. The airPoint XO provides traffic statistics. This helps the WISP to observe the behavior of network devices, traffic load fluctuations and other events, making it much easier to troubleshoot any problems, which might occur. The information available helps the WISP to optimize bandwidth utilization. WISPs can now easily provide services to more subscribers.



Easy Scalability & Roaming

By distributing the bandwidth management function from the centralized NOC out to individual airPoint XO access points, it is now possible to design scalable wide area networks. Bandwidth traffic policies can be set remotely from a central NOC. This avoids the need for backhauling all the data traffic to a single place, thus averting a choke point. All access points in the network controlled by one NOC not only brings convenience to network management but also enables mobile users to avail easy roaming facility. Roaming users can cross over seamlessly from one cell to another within the same WISP network, without the need for authentication at every cross-over.

Automatic Client Discovery and Authentication

The airPoint XO supports MAC/IP address based authentication. The devices on the network are automatically discovered and built into a tree-topology for easy management. The airPoint XO also supports a one-time authentication of clients. Repeat users are authenticated automatically when they log on to the network. The WISP has full control of the network to ensure that unauthorized users don't have access to network facilities.

Remote Management, Upgrades and Control

airPoint XO has built-in features to make device management both convenient and secure. It can provide access control lists and filters for SNMP traffic, as well as IP filtering. The airPoint XO supports remote setting of radio parameters, firmware upgrade and restore defaults through SNMP. Further, the WISP can also monitor the temperature of the unit through the thermal sensing facility, which is policy based. The product supports SNMP based remote monitoring and management through simpleNMS and simpleMonitor and has an embedded SNMP MIB.

Long Range™ Radio Performance and Flexible Antenna Options

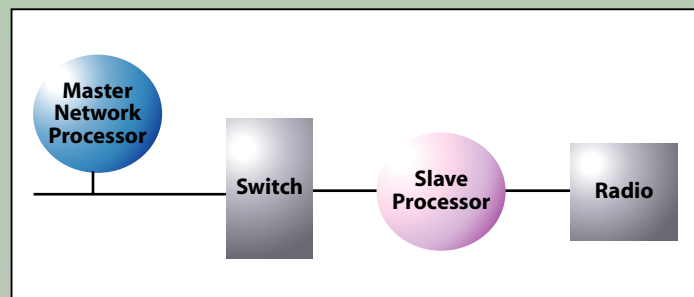
airPoint XO features LongRange™ wireless radio that delivers high data throughput over long operating range. With a suitable antenna airPoint XO's range easily extends to 34 kilometers (21 Miles). The airPoint XO has been FCC certified with many antenna configurations normally used by WISPs and outdoor wireless installers. Software controlled "Dial-a-Power" lets the installer control radio power output. Together, these features provide the much-needed flexibility to choose the right antenna with the pattern and gain characteristics conforming to local regulatory limits as well as coverage area requirements.

Carrier Class Reliability

Housed in a NEMA 4X weatherproof casing, and using industrial grade components, the airPoint XO is built to perform reliably under all climatic conditions, withstanding temperatures anywhere between -40 C and +60 C (-40 F to 140 F). The device has built-in sanity timers for automatic reset at periodic interval. Power to the radio can be remotely controlled. These housekeeping resets means very robust and self-healing Wide Area Networks. The product has heavy duty/built-in Gas Discharge Tube for surge suppression capability. Used along with the **PoE Outdoor** (standard accessory), the airPoint XO is an extremely robust outdoor device for WISPs. The airPoint XO complies with CE and FCC standards for wireless installations.

Reinforced Processing Capability for higher network loads

airPoint XO, with more raw processing power, surpasses other available devices allowing it to take on bigger network loads. The radio with its individual slave processor coupled with the master processor can support high network loads.



The airPoint XO addresses four key areas that are of vital importance in any WWAN network: **Subscriber Bandwidth Management, Advanced Networking Capabilities, Remote Infrastructure Management** and **Carrier-Class Reliability**. The wide ranging benefits from airPoint XO improve deployment economics and reduce the cost to build, maintain and expand any outdoor wireless networks profitably. On the subscriber management front, it opens up new and exciting possibilities to improve Quality of Service and pricing. airPoint XO is all set to transform infrastructure management in outdoor wireless networks.

Technical Specifications

Model No	SB5200
LAN Interface	10/100BaseT Ethernet Auto MDX cross-over- 1 foot outdoor rated CAT5 cable connected to the device and terminated into a weather-proof connector
Network Standards	IEEE 802.11b, 802.3, 802.3af
Data Rates Supported	Can be adjusted in steps of 64Kbps, upto max throughput
Frequency Band	2400 to 2483.5Mhz
Wireless Medium	Direct Sequence Spread Spectrum (DSSS)
Media Access Protocol	Carrier sense multiple access with collision avoidance (CSMA/CA)
Modulation	DSSS with CCK / DQPSK / DBPSK
Operating Channels	11 FCC, 13 ETSI, 14 Japan, 4 France, Other countries 3 non-overlapping channels
Receive Sensitivity	-92dBm at 1Mbps / -83dBm at 11 Mbps
Number of Outputs(radio)	1
Transmitter Output Power (Device/Radio)	+17.5 dBm max at the N-Connector, adjustable to 11.5dBm min using software control "Dial a Power"
Range	Up to 34 km (21miles) with proper antenna
Antenna Connector, Impedence	N (Female) Bulkhead Mount, 50 ohms
Compliance	Europe: ETSI 300-328, CE Marked
Under Certification	USA: FCC 47 CFR Part 15C, Section 15.247 - FCC Certification- ID: PWG SPEEDTRAP
SNMP Compliance	MIB I and MIB II
Management	SNMP ver 1 (MIB, Traps); TFTP (FW download), simpleNMS
Encryption Key Length	64-bit & 128-bit WEP
Remote Configuration Support	simpleMonitor, simpleDeploy, simpleNMS
Dimension (W x D x H)	180 mm x 180 mm x 60 mm (7.08 inches x 7.08 inches x 2.36 inches)
Unit Weight	~ 1 Kg (2.23 lbs) / Shipping ~ 1.85 Kg (4.08 lbs)
Operating Temperature	-40 deg C to +60 deg C (-40 F to +140 F)
Relative Humidity	Operating: 0 to 70% (non-condensing) Storage: 10 to 90% (non-condensation)
Mounting	Pole or wall mount via 2 pc U-Bolts & clamps (supplied)
Power Consumption	~ 18W
LEDs	Power, Ethernet, BW Controller, Activity, RF
Power Supply	48V Input , through PoE Outdoor (IEEE 802.3af compliant)

Standard Accessories

AC Adapter	90~264V AC in , 48V DC out , DeskTop Ver
PoE Outdoor	48V DC in , Ethernet in , PoE out, Surge Protection Built in

Package Contents

1. airPoint XO (with weatherproof connector)
2. PoE Outdoor (with 48 V power adapter and Wall Mount)
3. Earthing tag
4. Wall mount brackets (attached to airPoint XO unit)
5. Wall/Pole mount kit
6. Installation CD
7. Quick Install Guide

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Global Customer Support Center

Comprehensive technical support is available on our Internet website (<http://www.smartbridges.com/support/>).

Our technical support sections is regularly updated to provide the latest technical information. For 24 x 7 support, send an e-mail to: support@smartbridges.com

Please visit us at the Web at www.smartbridges.com



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