



Z H O N E

SkyZhone

SkyZhone 1200, 1204, 1224, 1400, 1404, 1424, 1600, 1604, 1624

- ✓ *High-performance platform for true multi-service Wi-Fi networks*
- ✓ *2.4 GHz unlicensed and/or 4.9 GHz licensed public-safety operation*
- ✓ *All-MIMO antenna design for superior network coverage*
- ✓ *Latest standards-based draft 802.11n support*
- ✓ *Integrated DSL Backhaul provides up to 22 M/bps to every unit*
- ✓ *Line powered for Telco-grade reliability*
- ✓ *Fully integrated with ZMS - Zhone's network management system*

Next Generation Metro Wi-Fi System



The SkyZhone metro Wi-Fi system gives network operators the means to utilize Wi-Fi to deliver a truly capable and reliable multi-service network. SkyZhone is line powered from the CO or remote terminal via a standards-based DSL line. The same copper pairs that provide power also provide high-speed backhaul. SkyZhone uses the IEEE 802.3ah Ethernet in the First Mile (EFM) standard to provide up to 22 M/bps backhaul.

SkyZhone enables voice, video, and data communications. The dual draft-802.11n radio architecture of the 1624 model provides 2.4 GHz access for residential and commercial applications, while simultaneously providing 4.9 GHz access for Public Safety applications using IEEE 802.11 client devices.

The SkyZhone system has been designed to provide the maximum possible coverage area per access point. Its all-MIMO antenna design (Multiple Input Multiple Output) is used to maximize the receive signal strength from typical low power client devices and to enable the SkyZhone to maintain a reliable link at distances up to 50% greater than traditional outdoor Wi-Fi solutions.

SkyZhone is also available in AC powered models. These units have the same excellent performance however, instead of being powered from the central office they are powered locally. Models are also available for use with local Ethernet and/or WDS Wi-Fi backhaul.

Carrier Class

Zhone products have been installed in networks across the globe, providing the Zhone development and support team with extensive experience in the deployment of mission critical networks. This practical experience has been applied to SkyZhone, making it the industry's first metro Wi-Fi system designed from the ground up to be carrier-class.

Carrier Class Features

Integrated primary / secondary lightning and surge protection. Secure management access via SSH and HTTPS over the wired uplink only. Centralized device monitoring and management using ZMS (Zhone Management System).

SkyZhone provides an Ethernet port that also supplies 48Vdc. This allows an IP camera or other device to be connected to, and powered by SkyZhone. SkyZhone is the ideal product for Public Safety - each unit is line powered and capable of supporting up to M/bps of backhaul capacity. This solution provides all the bandwidth needed for a video surveillance network.

The easy-to-use Zhone management system (ZMS) provides management and provisioning across the access network, including SkyZhone.

Technical Specifications

Dimensions

- 14 in wide, 6 in high, 6 in deep

Weight

- 18 lbs

Power

- 35 Watts Max

Interfaces

- G.SHDSL 5.7 Mbps symmetrical per pair
 - Up to 4 pairs bonded using IEEE 802.3ah standard
- Ethernet (10/100)
 - with 48 Vdc Output
- Serial Console

Wireless Support

- IEEE 802.11a (4.9GHz)
 - 4 SSIDs
 - 100 Clients
- IEEE 802.11b/g (2.4GHz)
 - 4 SSIDs
 - 100 Clients

Standards Support

- IEEE 802.3ah (2Base-TL) EFM
- IEEE 802.11a, IEEE 802.11b, IEEE 802.11g
- IEEE 802.1Q VLANs
- IEEE 802.1p Priority
- IEEE 802.1x, 802.11i, WPA, WPA2
- ITU G.991.2 G.SHDSL
- ITU G.994.1 G.handshake
- K.20 Surge Immunity

Protocol Support

- IEEE 802.1D Bridging
- IEEE 802.1Q VLANs
- IEEE 802.1p VLAN priority

Management

- HTTPS, SSH, TR-069
- RADIUS password authentication
- MAC Address Control List

Bandwidth/Distance

- IEEE 802.11a
 - 4.960 - 4.980 Ghz
 - a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
 - TX Power configurable from 20 dBi EIRP up to 28 dBi EIRP
 - Antennas: Omnidirectional 5 dBi
- IEEE 802.11 b
 - 2.412 - 2.462 Ghz
 - b: 11, 5.5, 2, 1 Mbps
 - TX Power configurable from 20 dBi EIRP up to 29 dBi EIRP
 - Antennas: Omnidirectional 5 dBi
- IEEE 802.11 g
 - 2.412 - 2.462 Ghz
 - g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
 - TX Power configurable from 20 dBi EIRP up to 30 dBi EIRP
 - Antennas: Omnidirectional 5 dBi

Regulatory Compliance

- FCC Part 15, Subpart-C (15.247)
- UL 60950-1, UL 60950-21
- Industry Canada RSS210, CAN/CSA-22.2 No. 60950-1-03
- IP66, NEMA4X, IEC 60529

Operating Requirements

- Temperature: -40° C to 55° C
- Non-operating Temperature: -40° C to 70° C
- Humidity: IP66 rated
- Altitude: -200ft to 16,500ft (-60m to 5,000m)

Ordering Information

SKYZHONE-1224	Single Radio, 2.4 GHZ, Line Powered, EFM-SHDSL backhaul
SKYZHONE-1424	Single Radio, 4.9 GHZ, Line Powered, EFM-SHDSL backhaul
SKYZHONE-1624	Dual Radio, 2.4 and 4.9 GHZ, Line Powered, EFM-SHDSL backhaul
SKYZHONE-1204	Single Radio, 2.4 GHZ, AC Powered, EFM-SHDSL backhaul
SKYZHONE-1404	Single Radio, 4.9 GHZ, AC Powered, EFM-SHDSL backhaul
SKYZHONE-1604	Dual Radio, 2.4 and 4.9 GHZ, AC Powered, EFM-SHDSL backhaul
SKYZHONE-1200	Single Radio, 2.4 GHZ, AC Powered, Wireless backhaul
SKYZHONE-1400	Single Radio, 4.9 GHZ, AC Powered, Wireless backhaul
SKYZHONE-1600	Dual Radio, 2.4 and 4.9 GHZ, AC Powered, Wireless backhaul
SKYZHONE-POLEMNT-KIT	Pole mount kit for the access point
SKYZHONE-WALLMNT-KIT	Wall mount kit including plastic enclosure, and bracket
SKYZHONE-STRAND-MOUNT-KIT	Strand mount kit for the access point
SKYZHONE-CBL-CONSOLE-5FT-9PIN	5 Foot Console Cable with DB9 connector
SKYZHONE-CBL-CONSOLE-30FT-9PIN	5 Foot Console Cable with DB9 connector
SKYZHONE-CBL-ETHERNET-5FT	5 Foot Ethernet Cable
SKYZHONE-CBL-ETHERNET-30FT	30 Foot Ethernet Cable



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