InscapeData

THE LEADING OUTDOOR NETWORK APPLIANCE COMPANY
Total Turnkey Solutions for Outdoor PoE, Wired/Wireless, and IP Video Applications

AirEther™ SB3000
802.11a/b/g/n MIMO
Outdoor AP/Router/Bridge System

- AES-based & IEEE802.1x
- Carrier Class
- Multimedia & QoS
- FIPS 140-2 Level 2 Supported

SB3240   SB3500

*Antenna Sold Separately

The AirEther SB3000 802.11a/b/g/n MIMO Outdoor AP/Router/Bridge System is a family of high performance radio products and is a carrier class outdoor wireless AP/router/bridge system that delivers maximum network performance up to 300Mbps. The SB3000 outdoor radio product family consists of the following four models:

SB3240 – 802.11 b/g/n MIMO Outdoor AP/Router/Bridge
◦ One 2.4GHz high power radio, 26 dBm transmit power per radio per chain
◦ Two external antenna connectors
◦ 300Mbps Bandwidth

SB3500 – 802.11 a/n MIMO Outdoor AP/Router/Bridge
◦ One 5GHz high power radio, 26 dBm transmit power per radio per chain
◦ Two external antenna connectors
◦ 300Mbps Bandwidth

The AirEther SB3000 outdoor radio system is a powerful and unprecedented 802.11 a/b/g/n MIMO Outdoor AP/Router/Bridge System that offers deployment flexibility for highly traffic Wifi hotspots, school campuses, industrial yards or plants, warehouses, seaport container/airport facilities, extreme industrial production areas, and other harsh environmental applications.

In addition to rich network features, the AirEther SB3000 outdoor radio system is designed with one 2x2 MIMO high power radio(s), i.e., 29dBm on 2.4GHz and 28dBm on 5GHz, together with two or four 5 dBi omni directional antenna delivering up to 300 Mbps per radio bandwidth. With powerful network security, i.e., AES 128bit & IEEE802.1x, this high performance outdoor AP/Router/Bridge system is engineered to survive in harsh outdoor environments, the AirEther SB3000 is built with a diecast aluminum enclosure that is designed to compliant to IP68 outdoor rating and is capable of withstanding exposure to high and low temperatures, persistent moisture and precipitation, and is fully sealed for protection from airborne contaminants. All electrical interfaces include industrial-strength surge protection.

The AirEther SB3000 outdoor radio system is designed with the Power over Ethernet (PoE) feature and operates from a 100 ~ 240 volt AC power source, which allows power and data transmitted over a single network cable. This capability provides for simple, convenient installation. Furthermore, when you use the LPS1000/2000/3000 Outdoor PoE Switch and networking with any of the AirGoggle NVC Series H.264 and Mega-pixel Cameras, all the wireless devices and the cameras are networked within a single outdoor LAN (Local Area Network). It becomes much easier to manage, integrate, install, maintain, and troubleshoot. Based on Inscape Data's patent-pending technology, our new Outdoor PoE Switch greatly lessens challenges for outdoor LAN design, integration, and deployment.

KEY FEATURES & BENEFITS

Secure and Scalable
- AES-based, the wireless bridge link is secure and can scale to support multiple networks segmented by VLANs
- Support up to two IEEE802.1x radius authentication servers for media-level access control and traffic policy based on user or machine identity

High Performance MIMO Radio
- High power radio(s) for extended areas of coverage
- Idea for hotels and resorts, ideal for schools, stadiums, parking lots, and other outdoor sports facilities
- Excellent for large enterprises or warehouses that have shipping docks and other outdoor areas

Multimedia and QoS (Qualify of Service) Support
- Support Quality of Service based on the IEEE 802.11e standard
- Improve the user experience for audio, video, and voice applications by prioritizing data traffic
- Up to 16 BSSIDs with unique QoS and security policies can be configured

FIPS-140-2 Security Supported
- This product supports the federal information processing standard (FIPS-140-2) cryptographic module to be used for sensitive government and healthcare applications.

Ruggedized Enclosure For Harsh Outdoor Environments
- IP68 compliant diecast enclosure for long term durable outdoor deployment
(plastic/diecast for quartette unit only)
- Outdoor grade enclosure supporting operating temperature between -40° C to 75° C
- Two or four external N-type antenna connectors

### Easy Installation and Paring
- Simplified wiring by PoE support for 100 ~ 240 volt AC power source
- Four system LED with additional Signal strengthen indicator for more effective AP/client paring
- Flexible wall and mast mounting options

APPLICATIONS

Hospitality   Education

Enterprise   Residential
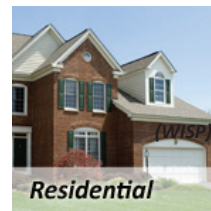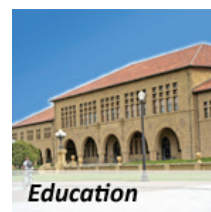
SYSTEM CONFIGURATIONS

Municipal Wireless Solution

SB3240

LPS1000
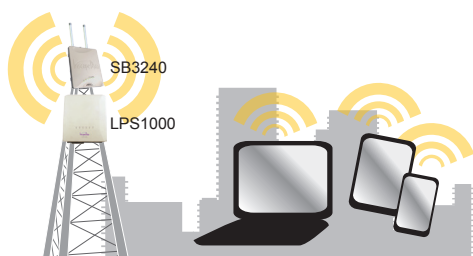
Outdoor Wireless Internet Service Solution

SB3240

LPS1000

SC 54   SC 54   SC 54

WWW
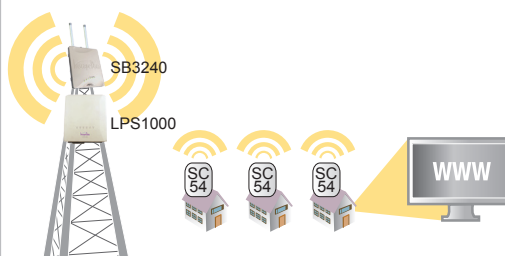
Outdoor Wireless VoIP Service Solution

SB3240

LPS1000
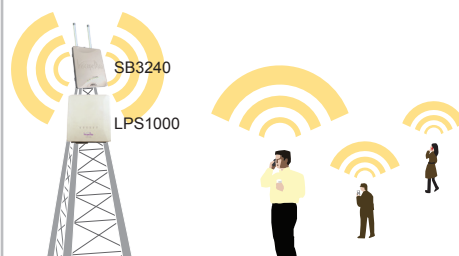
TECHNICAL SPECIFICATIONS: SB3000

	Software
	IEEE 802.11 a
	IEEE 802.11 b/g
	IEEE802.11n
	Auto Channel Selection
	Wireless Channels Support
	Channel Bandwidth Support
	Country Selection
	Preamble Type
	RTS Threshold Adjustment
	Channel Spectrum Width
	5/10/20/40 MHz
	Beacon Interval Adjustment
	SSID assignment
	MultiSSID (4 Virtual AP)
	VLAN Management Port/IP
	VLAN Per SSID
	Client BSSID assignment
	Short Slot time support
	IEEE 802.11d transparent Bridge
	Station Connection Info
	CTS-only & CTS/RTS protect mechanism support
	WMM support
	Bandwidth control
Wireless	Transmit Data Rate Lock (Auto, 54, 36, etc..)
	Client Limiting Feature
	Concurrent Stations
	Simultaneous Vo-Fi
	Throughput
	TPC (Transmit Power Control) Support in dBm
	RSSI Values in dBm
	RF Site Survey
	Burst Mode
	User Adjustable ACK Timing
	Auto Adjust for Slottime, ACK Timeout, CTS Timeout
	Signal Strength Indicator (4 Levels)
	Max Data Rate 300Mbps per Radio
	Radio Chains
	2 Spatial Streams
	Remote AP-Preferred MAC
	Remote AP Lock
	Channel Scan List
	Rate Aggressiveness
	CTS Timeout
	Signal Strength Indicator
	Noise Immunity
	Enable/Disable Radio
	AeroScount RFID Tag Detection
	Antenna Selection, Ant 1, Ant2

	Operation Mode
	DHCP Client
	DHCP Server
	AP
	PTMP Bridge
Operation Mode	Repeater Mode
	AP Client
	WDS
	Router

	Security
	Http User Name and Password
	Read Only Account
	HTTPS
	Access Control List, i.e (None/Accept/Deny)
	IEEE802.1x
Security	Wireless Station Isolation
	Hide SSID
	Wireless Intrusion Detection
	802.11i (AES)
	NIST FIPS-140-2 Level 2

	Management
	NTP
	Bridged Station List
	Site Survey
	HTTP Web based configuration
	Selectable HTTP port
	Fallback IP
	Static, DHCP Client, PPPoE
	Message Log
Management	Configuration Management (Backup/Restore System File)
	Statistics support
	Telnet
	FTP/TFTP
	SSH
	SNMP v2c
	Ping Watchdog
	Auto-Reboot
	Host Name
	Device Search, IP Locator

	Firmware Upgrade
Firmware Upgrade	HTTP Network Protocol Download
	Configuration Retention after FW Upgrade

	Network
	NAT
	VPN Pass Through
	STP
	DMZ
	IP/Port Forwarding
	Static Routing
	RIP v1 & V2
Network	VLAN Tag support
	Firewall
	UPnp
	Multicast Routing
	Protocols
	TCP/IP, RTSP, UDP, IGMP, DHCP, Tags, PPPOE, DHCP client, DHCP Server
	Maximum Ethernet Clients Supported (128)

	Housing
	LED
	PWR, LAN, WLAN
	4-Level Signal Strengthen LED
	LAN Port (1) , WAN Port (1)
Housing	Adjustable Pan/Tilt Bracket
	No of Extenernal Antenna Connector (2)
	WAN Port with PoE Enable, IEEE802.3af (48V ~ 56V)
	IP 68 Rating

System Compliance	FCC, CE, ROHS, ETSI, Japan

SYSTEM DIMENSIONS & INTERFACES
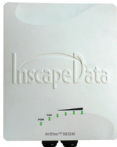
Height: 9.6" (244mm)

Width: 7.9" (201mm)

Depth: 3.25" (83mm)

ACCESSORIES

Power

PIA200
Gigabit PoE Injector

Cables

AC100
1M Low Loss
Antenna Cable
N-Male to N-Male

WC002
Waterproof
Connector Set

WC25, WC75, WC100
25Ft, 75Ft, and 100Ft CAT5
Outdoor Grade Ethernet Cables

Antenna Options

Omni-Directional Antenna

OA09	OA12	OA15
2.4GHz	2.4GHz	2.4GHz
9dBi	12dBi	15dBi

Panel MIMO Antenna (Dual Polarity)

PA12M	PA18M	PA21M	PA5G14M	PA5G18M
2.4GHz	2.4GHz	2.4GHz	5GHz	5GHz
12dBi	18dBi	21dBi	14dBi	18dBi

Parabolic Dish MIMO Antenna (Dual Polarity)

DA5G25M	DA5G28M	DA5G32M
5GHz	5GHz	5GHz
25dBi	28dBi	32dBi

PACKAGE CONTENT

1. AirEther SB3240 or SB3500 Unit
2. PoE DC Injector with internal switching power supply
3. Product Resource Disc
4. Mounting Kit: Mast Mounts (1" to 3") and Wall Mounts
5. Warranty Information Sheet
6. Weatherproof Connector Set
7. Ground Cable
* Omni Antenna(s) NOT Included

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