

AirEther™ AB54/ AB54E/ AB54E Pro Long Range Wireless Base Station IP67/68 Certified All Weather Enclosure

The AirEther™ AB54, AB54E and AB54E Pro are low cost wireless base station products, and are designed for carrier class outdoor wireless applications capable of operating at one of the four modes, such as Access Point, Wireless Bridge, Repeater mode or Long Range Client Bridge. The AB54 and AB54E are manufactured with an IP67 certified weatherproof enclosure and the AB54E Pro is manufactured with an IP68 certified weatherproof enclosure and all of these systems are designed for Near Line of Sight conditions. The radio performance of the AirEther AB54, AB54E, and AB54E Pro is designed and optimized for long range and high throughput wireless communications based on the IEEE 802.11 b/g standards.

The AirEther AB54 and AB54E Outdoor Wireless Access Point, Wireless Bridge, Repeater and Client Bridge offer a high performance, robust, and extensive wireless coverage area that is an ideal outdoor Wireless Client Bridge solution for operating in a point-to-point mode and supporting point-to-point topology.

Features and Benefits

- IP configuration software designed with user friendly GUI for easy configuration of the wireless system, such as factory default setting, IP address setting, and wireless setting
- Allow either vertical or horizontal antenna polarity alignment
- The AirEther AB54E Pro offers 30 dBm transmit power (1W) when operating under the 802.11b mode (500W), and offers 27 dBm transmit power when operating under the 802.11g mode (FCC only)
- The AirEther AB54E and AB54E Pro offer an external N-Female antenna for using with more flexible antennas, such as high gain omni directional or a more narrow beamwidth sector antenna
- Supports WPA and WPA-PSK with AES and TKIP, 152-bit encryption for the highest data security
- Easy to install with cost effective Power over Ethernet (PoE)
- Swivel mounting accessories provide an out-of-the-box solution for quick and easy installation
- Compliant to the IEEE 802.11 b/g standards, DSSS for 802.11b mode radio operations and OFDM technology for 802.11g mode radio operations, and support Super G mode for up to 108 Mbps of data rate
- The AirEther AB54 is designed with a built in 12 dBi directional panel antenna and AB54E/Pro with type N female antenna connector
- Built in site survey and management tools for simplified installations and operations of wireless system
- Low profile enclosure designed for minimum wind resistance
- Transmit power control for optimal long range radio performance
- IP67 certified all weather housing for outdoor environments; protected by a heavy-duty UV stable glass filled Polycarbonate plastic housing
- Fully weatherized outdoor unit operates in temperatures ranging from -22°F to +180°F (-30°C to +70°C)

Applications



Airports

Regardless if it is inside or outside of an airport, Inscape Data offers total wire or wireless IP based video security solutions that will save your installation cost and make your monitoring more efficient



Metropolitan Street

Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make the streets and metropolitan safer



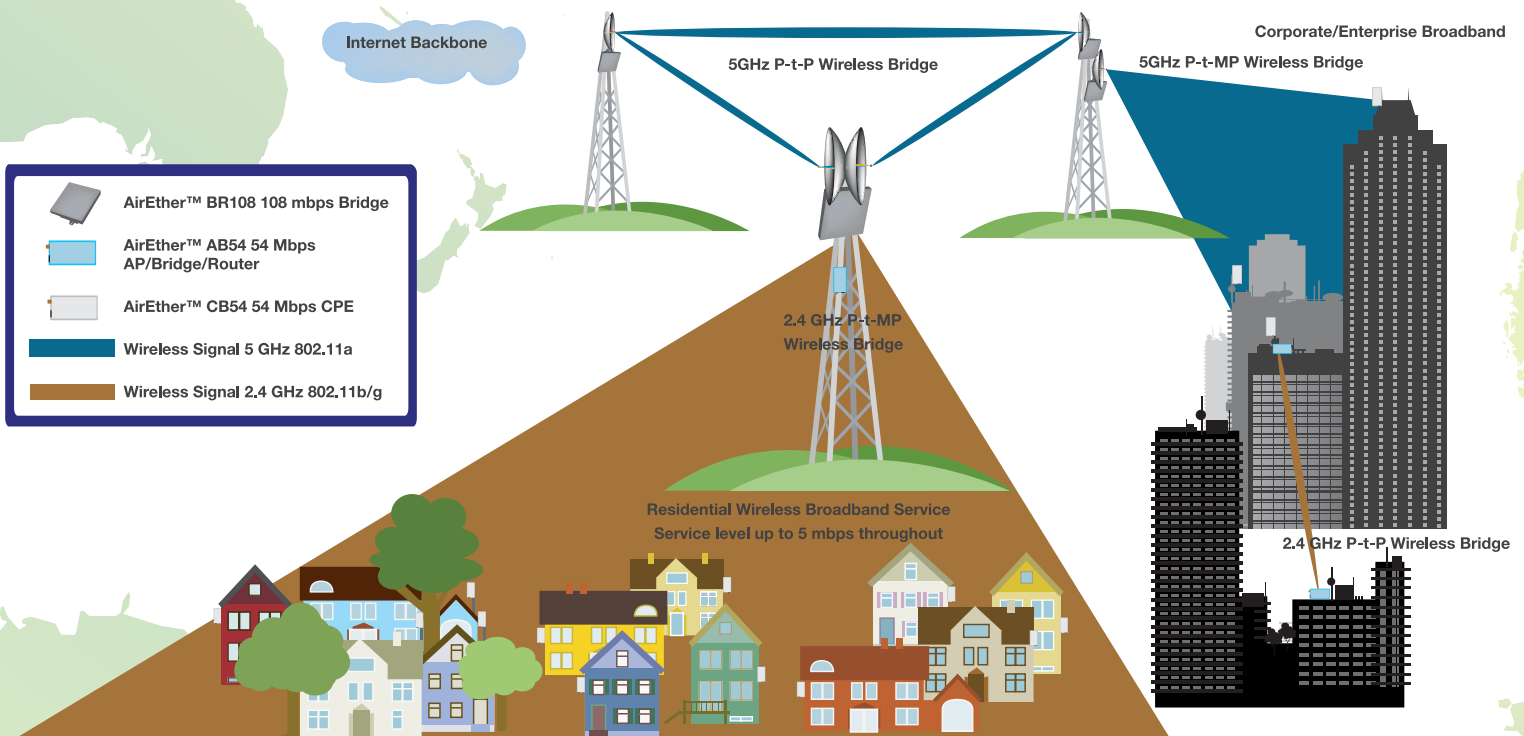
Buildings

Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make your building more secure



School Campus

Regardless if it is inside classrooms or on a campus, Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make your monitoring easier



Technical Specifications

	AB54	AB54E	AB54E Pro
Standards Compliance			
IEEE 802.11b/g	●	●	●
IEEE 802.3, IEEE 802.3u	●	●	●
Modulation			
IEEE802.11b: CCK,DQPSK,DBPSK	●	●	●
IEEE802.11g: OFDM	●	●	●
Frequency Band			
America/FCC : 2.412~2.462 GHz (11 channels)			
Europe CE/ETSI : 2.412~2.472 GHz (13 channels)	●	●	●
Japan : 2.412~2.484 GHz (14 channels)			
Transmission Power (FCC)			
dBm max	21	21	30
EIRP (dBi) max	33		
Transmission Power (CE/ETSI)			
dBm	20*	20*	
Transmission Rate			
IEEE802.11b: 1/2/5.5/11Mbps	●	●	●
IEEE802.11g: 6/9/12/18/24/36/48/54Mbps	●	●	●
Super g: up to 108 Mbps	●	●	●
Access Point Interfaces			
Auto MDI/MDI-X Ethernet 10/100Base-TX: RJ-45	●	●	●
Receiver Sensitivity			
802.11b -85dBm@ 11mbps, -88 dBm@ 5.5 mbps, -90 dBm@ 2 mbps, -94 dBm@ 1 mbps	●	●	●
802.11g -91dBm@ 6mbps, -88 dBm@ 12 mbps,-82 dBm @36mbps, -76 dBm@ 54 mbps, -70 dBm@ 108mbps	●	●	●
Antenna Type			
Integrated directional panel antenna (dBi)	12		
Beamwidth			
Horizontal, Vertical	40°, 40°		
Antenna Connector			
N-Female		●	●
Security Systems			
64-bit/128-bit/152-bit WEP encryption; Wi-Fi Protected Access WPA with AES or TKIP, WPA-PSK	●	●	●
Wireless Setting			
Access Point, Wireless Bridge, Repeater, Client Bridge	●	●	●
Software/Firmware			
Site Survey			
Wireless Client List			
DHCP Client			
Wireless access control by MAC address (deny or accept)	●	●	●
WPA Support (WPA personal and enterprise)			
Web-based configuration via popular browser (IE, Netscape)			
Firmware upgrade and configuration backup via Web			
Reset to default by WebUI or software			
SNMP			
Environment Temperature			
-22°F to +158°F (-30°C to +70°C)	●	●	●
Power			
12 Volt DC 5%; 1.5A (Max.); AC adapter AC 100V~240V	●	●	
48 Volt DC 5%; 2A (Max.); AC adapter AC 100V~240V			●
Network Management			
System OS Support Windows 95/98/Me/NT4.0/2000/XP	●	●	●
Warranty			
One year limited	●	●	●

Accessory Options

- AC100 - 1M Low Loss Antenna Cable, N-Male to N-Male
- WC001 - Waterproof Connector Set
- WC25, WC75, WC100 - 25Ft, 75Ft, and 100Ft CAT5 outdoor grade Ethernet cables
- WM001 - Wall Mounting Kit (for AB54 and AB54E)

To get more information on this product please visit www.inscapedata.com/ab54.htm

Contact Information



United States Headquarters
1611 South Main Street
Milpitas, CA 95035, U.S.A.
Customer Service and Orders:
Phone: +1.408.935.8500
Toll Free: 1.888.267.4507
Fax: +1.408.935.8900
sales@inscapedata.com

Asia Headquarters
Inscape International Co., Ltd
34F-1, No. 170, Jingping Road
Zhonghe City, Taipei County, 235, Taiwan, R.O.C.
Phone: +886.2.2949.4141
Fax: +886.2.2949.2684



AirEther AB54
Access Point, Wireless
Bridge, Repeater, Client
Bridge



AirEther AB54E
Access Point, Wireless
Bridge, Repeater, Client
Bridge



AirEther AB54E Pro
Access Point, Wireless
Bridge, Repeater, Client
Bridge
(1W Output Power)

Package Contents

- AirEther AB54, AB54E, or AB54E Pro Outdoor Wireless Based Station Unit
- Ethernet Inline Power Injector (PoE)
- AC-DC, Adapter with Wall-Plug Power Cord
- Installation CD and guide with Locator Utility & User Manual CD
- Mass Mounting (U Bolt) Kit (all units) and Wall Mounts (AB54E Pro only)
- Waterproof Connector
- Warranty Information Sheet

Antenna Options



Model	OA09	SA1821**	PA21**
Antenna Type	Omni	Sector	Panel
Frequency Range	2.4GHz to 2.5GHz	2.4GHz to 2.5GHz	2.4GHz to 2.5GHz
Gain	9 dBi	18 to 21 dBi	21 dBi
VSWR	<= 1.3:1	<= 1.3:1	<= 1.3:1
Polarization	Vertical	Vertical	Vertical
Beamwidth			
Horizontal	360°	60° to 120°	15°
Vertical	12°	10°	20°
Connector	N-Female	N-Female	N-Female
Weight	200g	1030g	1300g
Size			
Length	390mm	184.9 mm	370 mm
Width		65 mm	370 mm
Height		370 mm	30 mm
Antenna Diameter	20 mm		
Mass Diameter	29 mm		

Recommended use with AB54E and AB54 E Pro

* The use of transmit power control is required to maintain 20dBm EIRP

** Antenna use for FCC only

AirEther™ CB54/ CB54E/ CB5418 2.4 GHz Long Range Wireless Client Bridge IP67 All Weather Certified Enclosure

The AirEther™ CB54, CB54E, CB5418 are low cost outdoor residential Customer Premises Equipment (CPE) and are manufactured with an IP67 certified weatherproof enclosure for Near Line of Sight conditions. The radio performance of the AirEther CB54, CB54E, and CB5418 are designed and optimized for long range and high throughput wireless communications based on the IEEE 802.11 b/g standards.

The AirEther CB54, CB54E, CB5418 Outdoor Wireless Client Bridges offer a high performance, robust and extensive wireless coverage area that is an ideal outdoor Wireless Client Bridge solution for operating in bridge-to-bridge mode and supporting point-to-point topology.



AirEther CB54
2.4GHz Long Range
Wireless Client Bridge

AirEther CB54E
2.4GHz Long Range
Wireless Client Bridge

AirEther CB5418
2.4GHz Long Range
Wireless Client Bridge

Key Features

- The AirEther CB54 is designed with a built in 12 dBi directional panel antenna on the front of the housing for cost savings
- The AirEther CB54E offers an external N-Female antenna for use with antennas such as a more flexible high gain omni directional antenna or a more narrow beam width sector antenna
- Supports WPA and WPA-PSK with AES and TKIP, 152-bit encryption for the highest data security
- The AirEther CB5418 is integrated with a built in 18 dBi directional panel antenna on the front of the housing for cost savings (FCC only)
- IP Installer management software with user friendly GUI for easy configuration of the Customer Premises Equipment (CPE) such as factory default setting, IP address setting, and wireless setting
- Swivel mounting accessories provide an out-of-the-box solution for quick and easy installation
- Compliant to the IEEE 802.11 b/g standards, DSSS for 802.11b mode radio operations and OFDM technology for 802.11g mode radio operations, and support Super G mode for up to 108 Mbps of data rate
- Easy to install with cost effective Power over Ethernet (PoE)
- Allow either vertical or horizontal antenna polarity alignment
- Transmit power control for optimal long range radio performance
- Low profile enclosure designed for minimum wind resistance
- Built in site survey and management tools simplify installations and operations of wireless system
- IP67 certified all weather housing for outdoor environments; protected by a heavy-duty UV stable glass filled Polycarbonate plastic housing
- Fully weatherized outdoor unit operates in temperatures ranging from -22°F to +180°F (-30°C to +70°C)

Applications



Airports

Regardless if it is inside or outside of an airport, Inscape Data offers total wire or wireless IP based video security solutions that will save your installation cost and make your monitoring more efficient



Metropolitan Street

Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make the streets and metropolitan safer



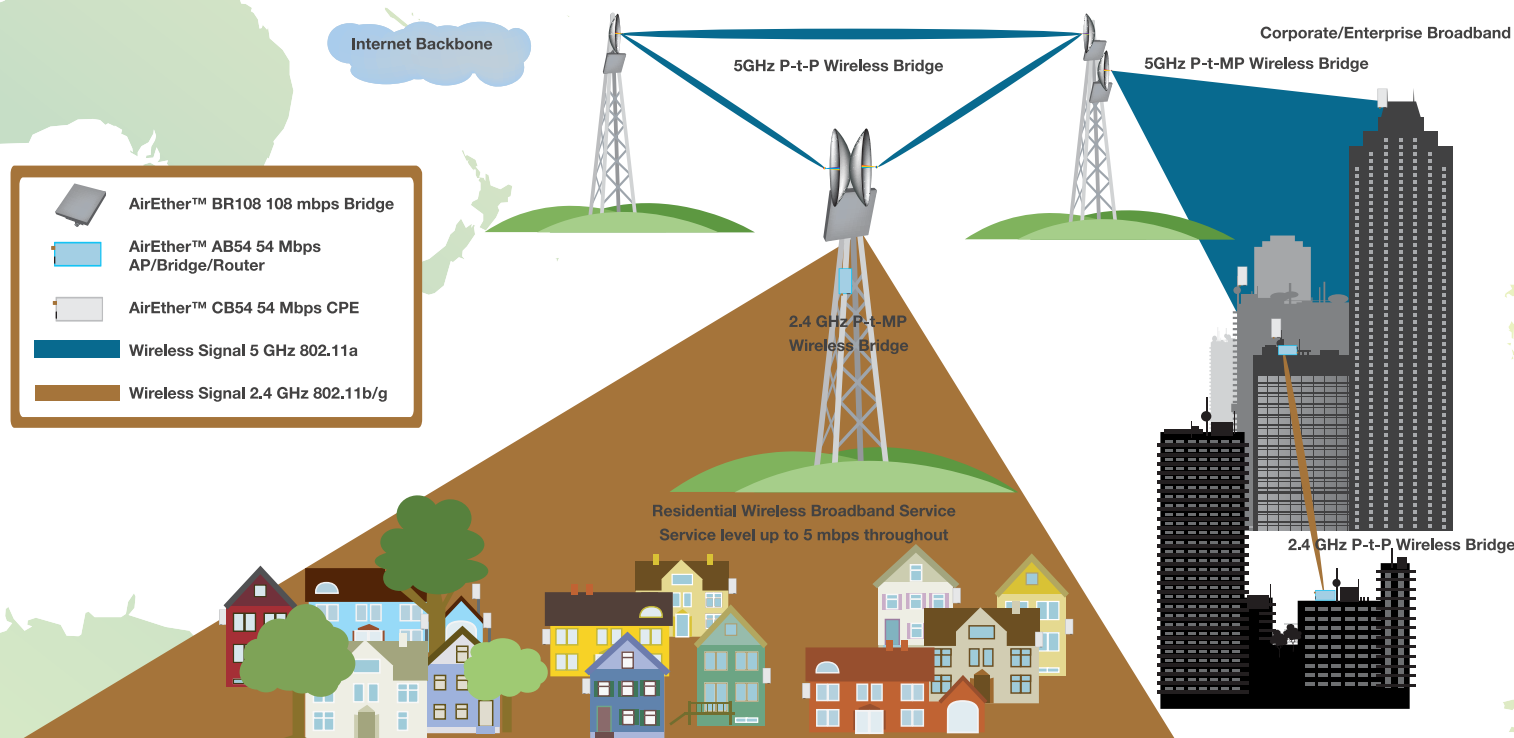
Buildings

Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make your building more secure



School Campus

Regardless if it is inside classrooms or on a campus, Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make your monitoring easier



Technical Specifications

	CB54	CB54E	CB5418
Standards Compliance			
IEEE 802.11b/g	●	●	●
IEEE 802.3, IEEE 802.3u	●	●	●
Modulation			
IEEE802.11b: CCK,DQPSK,DBPSK	●	●	●
IEEE802.11g: OFDM	●	●	●
Frequency Band			
America/FCC : 2.412~2.462 GHz (11 channels)			
Europe CE/ETSI : 2.412~2.472 GHz (13 channels)	●	●	●
Japan : 2.412~2.484 GHz (14 channels)			
Transmission Power (FCC)			
dBm max	21	21	21
EIRP (dBi) max	33	Up to 48	39
Transmission Power (CE/ETSI)			
dBm	20*	20*	
Transmission Rate			
IEEE802.11b: 1/2/5.5/11Mbps			
IEEE802.11g: 6/9/12/18/24/36/48/54Mbps	●	●	●
Super g: up to 108 Mbps	●	●	●
Access Point Interfaces			
Auto MDI/MDI-X Ethernet 10/100Base-TX: RJ-45	●	●	●
Receiver Sensitivity			
802.11b -85dBm@ 11mbps, -88 dBm@ 5.5 mbps, -90 dBm@ 2 mbps, -94 dBm@ 1 mbps	●	●	●
802.11g -91dBm@ 6mbps, -88 dBm@ 12 mbps,-82 dBm @36mbps, -76 dBm@ 54 mbps, -70 dBm@ 108mbps	●	●	●
Antenna Type			
Integrated directional panel antenna (dBi)	12		18
Beamwidth			
Horizontal, Vertical	40°, 40°		25°, 20°
Antenna Connector			
N-Female		●	
Security Systems			
64-bit/128-bit/152-bit WEP encryption; Wi-Fi Protected Access WPA with AES or TKIP, WPA-PSK	●	●	●
Wireless Setting			
Operation Mode - Client Bridge (Point-to-Point)	●	●	●
Software/Firmware			
Site Survey			
Wireless Client List			
DHCP Client			
WPA Support (WPA personal and enterprise)	●	●	●
Web-based configuration via popular browser (IE,Netscape)			
Firmware upgrade and configuration backup via Web			
Reset to default by WebUI or software			
Environment Temperature			
-22°F to +158°F (-30°C to +70°C)	●	●	●
Power			
12 Volt DC 5%; 1.5A (Max.); AC adapter AC 100V~240V	●	●	●
Network Management			
System OS Support Windows 95/98/Me/NT4.0/2000/XP	●	●	●
Warranty			
One year limited	●	●	●

Accessory Options

1. AC100 - 1M Low Loss Antenna Cable, N-Male to N-Male
2. WC001 - Waterproof Connector Set
3. WC25, WC75, WC100 - 25Ft, 75Ft, and 100Ft CAT5 outdoor grade Ethernet cables
4. WM001 - Wall Mounting Kit

To get more information on this product please visit www.inscapedata.com/cb54.htm

Contact Information



United States Headquarters
1611 South Main Street
Milpitas, CA 95035, U.S.A.
Customer Service and Orders:
Phone: +1.408.935.8500
Toll Free: 1.888.267.4507
Fax: +1.408.935.8900
sales@inscapedata.com

Asia Headquarters
Inscape International Co., Ltd
34F-1, No. 170, Jingping Road
Zhonghe City, Taipei County, 235, Taiwan, R.O.C.
Phone: +886.2.2949.4141
Fax: +886.2.2949.2684



AirEther CB54

Wireless Client Bridge

AirEther CB54E

Wireless Client Bridge

AirEther CB5418

Wireless Client Bridge

Package Contents

1. AirEther CB54/ CB54E/CB5418 Outdoor Wireless Client Bridge Unit
2. Ethernet Inline Power Injector (PoE)
3. AC-DC Adapter with Wall-Plug Power Cord
4. Installation CD and Guide with Locator Utility & User Manual CD
5. Mast Mounting Kit (U Bolt)
6. Waterproof Connector Set
7. Warranty Information Sheet

Antenna Options



Model	PA21**
Antenna Type	Panel
Frequency Range	2.4GHz to 2.5GHz
Gain	21 dBi
VSWR	<= 1.3:1
Polarization	Vertical
Beamwidth	
Horizontal	15°
Vertical	20°
Connector	N-Female
Weight	1300g
Size	
Length	370 mm
Width	370 mm
Height	30 mm

* The use of transmit power control is required to maintain maximum of 20 dBm EIRP

**Recommended use with CB54E (FCC only)

AirEther™ BR108

5GHz Long Range Backhaul Wireless Bridge

Higher Power 200mW Output

IP68 Certified All Weather Enclosure

The AirEther™ BR108 is a carrier class long range outdoor wireless bridge and is an ideal outdoor wireless backhaul solution. It is protected by an IP68 certified die-cast all weather housing and lightning protector. The BR108 is also designed for a wide variety of outdoor applications and can be deployed as point-to-point and point-to-multipoint solutions. The BR108 is an ideal backhaul solution due to its low cost, superior performance, range, ease of installation and management.

The AirEther BR108 offers two data rates, based on the IEEE 802.11a mode and the IEEE802.11a turbo mode. When the bridge operates under the IEEE 802.11a mode, it supports data rates from 6 Mbps to 54 Mbps. Under the IEEE802.11a turbo mode, it supports data rates from 12 Mbps to 108 Mbps.



AirEther™ BR108
5GHz Long Range Backhaul Wireless Bridge
Higher Power 200mW Output

Key Features

- Higher Power 200mW Output
- High Capacity 108mbps Data Rate
- SNMP
- Tri-Band 5.15~5.8 GHz operating frequency
- Power Over Ethernet (PoE)
- Spanning Tree Protocol
- Up to 16 Point to multipoint bridge links
- 802.11H smart DFS bridge support

Features and Benefits

- The AirEther BR108 is flexible and operates as a PtP (Point-to-Point) or PtMP (Point-to-Multi-Point) long range wireless bridge linking networks in different buildings or remote locations
- MAC address-based access control with 54-bit/128-bit/ 152-bit WEP encryption for stronger security
- Enhanced transmission with up to 54 Mbps or 108 Mbps under turbo mode for extended wireless data rate
- Sturdy design is mechanically sealed for 100% product security under harsh weather environments and temperatures ranging from -22°F to +180°F (-30°C to +70°C)
- Industrial strength mast and wall mount bracket for easy installation
- Easy installation with cost effective Power over Ethernet (PoE)
- Unique IP68 die-cast metal weather proof housing designed to function as a ground plane, forming a perfect radiation pattern, and improved antenna performance

Applications



Airports

Regardless if it is inside or outside of an airport, Inscape Data offers total wire or wireless IP based video security solutions that will save your installation cost and make your monitoring more efficient



Metropolitan Street

Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make the streets and metropolitan safer



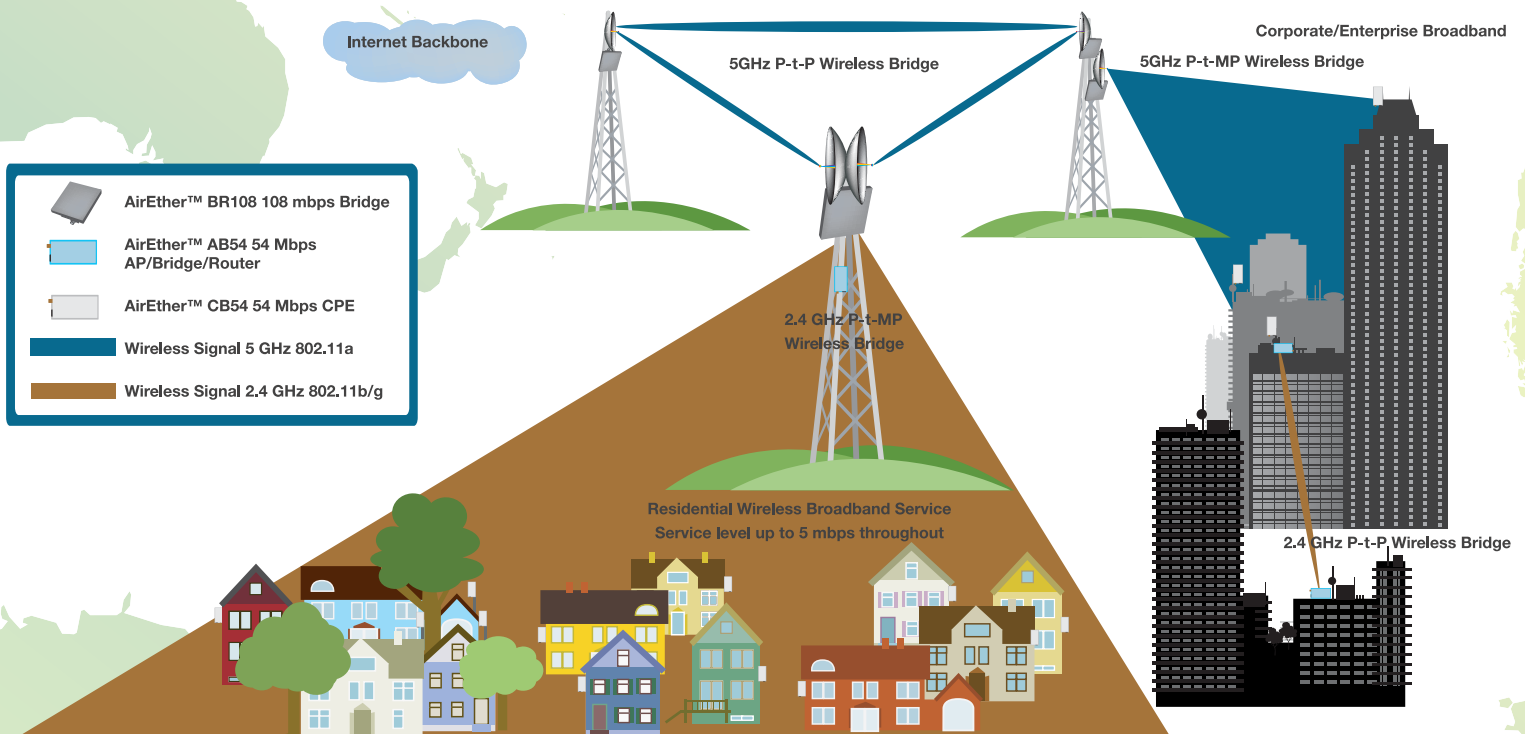
Buildings

Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make your building more secure



School Campus

Regardless if it is inside classrooms or on a campus, Inscape Data's wire and wireless IP based video security solutions will save your installation cost and make your monitoring easier



Technical Specifications

BR108	
Standards Compliance	
IEEE 802.11a	●
IEEE 802.3, IEEE 802.3u	●
802.11H, dynamic frequency selection & transmit power control	●
Modulation	
IEEE802.11a: OFDM	●
Frequency Band	
America/FCC : 5.15~5.85 GHz (13 channels)	
Europe CE/ETSI : 5.50~5.70 GHz (13 channels)	●
Japan : 5.50~5.70 GHz (14 channels)	
Transmission Power	
dBm	23
Transmission Rate	
IEEE802.11a: 6/12/18/24/36/48/54/108Mbps	●
Access Point Interfaces	
Ethernet 10/100Base-TX: RJ-45	●
Receiver Sensitivity	
802.11a -88@ 6Mbps, -87@ 12Mbps, -84@ 18Mbps,	
-81@ 24Mbps,-76@ 36Mbps, -72@ 48Mbps, -68@ 54Mbps,	●
-64@108Mbps	
Antenna Connector	
N-Female	●
Security Systems	
64-bit/128-bit/152-bit WEP encryption	●
Wireless Setting	
Operation Mode - Bridge (Point-to-Point or Point-to-Multipoint 1:16)	●
Software/Firmware	
Signal Strength Meter (dBm)	
Link Quality Meter (dBm)	
SNMP	
Spanning Tree Protocol (802.1d)	
DHCP Client	●
Wireless access control by MAC address (deny or accept)	
Web-based configuration via popular browser (IE,Netscape)	
Firmware upgrade and configuration backup via Web	
Reset to default by WebUI or software	
Environment Temperature	
-22°F to +158°F (-30°C to +70°C)	●
Power	
48 Volt DC 5%; 2A (Max.); AC adapter AC 100V~240V	●
Network Management	
System OS Support Windows 95/98/Me/NT4.0/2000/XP	●
Warranty	
One year limited	●



AirEther™ BR108
5GHz Long Range Backhaul Wireless Bridge
Higher Power 200mW Output

Antenna Options



Model	PA5G21	SA5G21
Antenna Type	Panel	Sector
Frequency Range	5.1 GHz to 5.9 GHz	5.1 GHz to 5.9 GHz
Gain	21 dBi	21 dBi
VSWR	<= 1.5:1	<= 1.5:1
Polarization	Vertical	Vertical
Beamwidth		
Horizontal	20°	60° to 120°
Vertical	10°	10°
Connector	N-Female	N-Female
Weight	1500g	1830g
Size		
Length	300 mm	184.9 mm
Width	300 mm	65 mm
Height	50 mm	852 mm

Package Contents

1. AirEther BR108 Outdoor Wireless Bridge Unit
2. POE DC Injector
3. AC-DC, Adapter with Wall-Plug Power Cord
4. Installation CD and guide with Locator Utility & User Manual CD
5. Mounting Kit - Mast Mounts (1" to 3") and Wall Mounts
6. Warranty Information Sheet
7. Weatherproof connector set
8. Ground cable

Optional Accessories

1. AC100 - 1M Low Loss Antenna Cable, N-Male to N-Male
2. WC001 - Waterproof Connector Set
3. WC25, WC75, WC100 - 25Ft, 75Ft, and 100Ft CAT5 outdoor grade Ethernet cables

To get more information on this product please visit www.inscapedata.com/br108.htm

Contact Information



United States Headquarters
1611 South Main Street
Milpitas, CA 95035, U.S.A.
Customer Service and Orders:
Phone: +1.408.935.8500
Toll Free: 1.888.267.4507
Fax: +1.408.935.8900
sales@inscapedata.com

Asia Headquarters
Inscap International Co., Ltd
34F-1, No. 170, Jingping Road
Zhonghe City, Taipei County, 235, Taiwan, R.O.C.
Phone: +886.2.2949.4141
Fax: +886.2.2949.2684