

AirEther™ SC54 Dual Band Outdoor Wireless Client Bridge



Inscape Data's AirEther™ SC54 Dual Band Outdoor Wireless Client Bridge is designed for outdoor long-range wireless communication up to 50km. Based on the IEEE 802.11 a/b/g standards operating on 2.4GHz or 5GHz frequency with peak transmit power up to 500mW* and 300mW* respectively. The AirEther SC54 is an ideal cost-effective solution for wireless network service provider subscriber solution. The ruggedness of IP68 rated enclosure and extreme temperature ratings along with host of product features makes the AirEther SC54 the product choice for long range wireless subscriber for network service provider.

*For continuous power specification at various data rates, please refer to backside of datasheet.

KEY FEATURES & BENEFITS

Carrier Class Quality

Carrier class broadband wireless access solution provides scalability, reliability, and superior performance in the most challenging environments.

License Free Long Range Dual Band Operation

Software Selectable 2.4 GHz or 5 GHz operation offers over 20 non-overlapping channels for the most flexible interference free application scenario without the need for regulatory frequency licensing.

Internal and External Antenna Selection

Embedded 12 dBi 2.4 GHz antenna offers nominal wireless range. If extended range up to 50km is desired, the use of external 2.4 GHz or 5GHz antenna is optional.

Wireless Multimedia

Based on the IEEE 802.11e standard, Wireless multimedia (WMM) provides enhancement for voice and video over IP applications

Rugged Outdoor Weatherproof Design

The IP68 compliant weatherproof enclosure, connectors, and extreme weather rating electronic components continue to perform in the most extreme weather conditions.

Standards Base Wireless Subscriber Equipment

Long Range IEEE compliant 802.11a/b/g Client provides license free subscriber based network solutions for wireless network service providers.

Power over Ethernet

The built-in PoE feature eliminates power connection at the camera location. This eliminates the need of running an additional power line cable.

Integrated RF Site Survey Tool

RF wireless site survey tool built into every radio for simplified frequency planning and installation.

Secure Wireless Transmission

Equipped with Government Strength Advance Encryption System (AES), transmission of top level information is highly secure with the AirEther outdoor wireless system.

APPLICATIONS



WIRELESS NETWORK SOLUTIONS

Subscriber based network solution compliant to IEEE 802.11a/b/g provides long range wireless point to multipoint solution to residential and business customers. The AirEther outdoor wireless system provides high reliability and performance for the most demanding wireless networking applications.



WIRELESS ISP

Complete license free standards based outdoor wireless infrastructure solutions from Inscape Data catering to wireless internet service providers. Inscape Data is your one-stop source for high performance economical outdoor wireless solutions.



WIRELESS INFRASTRUCTURE

Complete outdoor wireless infrastructure solutions from Inscape Data catering to municipalities, SCADA, wireless machine to machine, telemetry, institutions, campuses, and more. Inscape Data is your one-stop source for high performance economical outdoor wireless solutions.



CARRIER SOLUTIONS

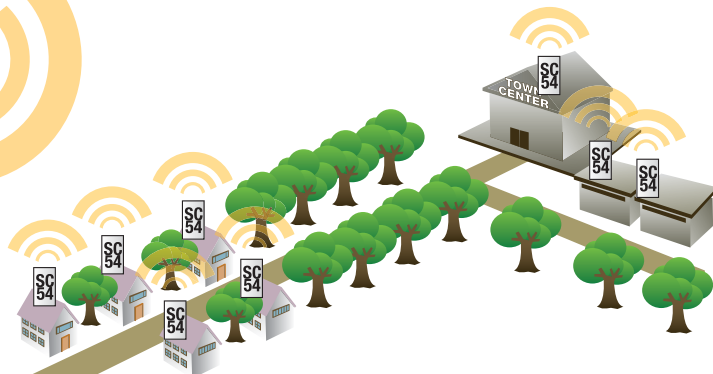
Inscape Data antenna outdoor wireless solutions provide the best in class 2.4 GHz and 5.8 GHz subscriber based network. The high performance characteristics keep high demand subscribers and wireless transmission networks moving in the most extreme weather conditions.


SYSTEM CONFIGURATIONS: OUTDOOR WIRELESS INTERNET SOLUTION

BROADBAND INTERNET
WITH SB54, SC54
(WITH/WITHOUT
SECTOR ANTENNAS)



SC54
Dual Band
Outdoor Wireless
Client Bridge



Hardware	
Enclosure Protection	IP68 Compliant
Environmental	-40°C to +85°C
Humidity	95% @ 55°C
Frequency	2.412 ~ 2.477 GHz, 5.180 ~ 5.250 GHz, 5.260 ~ 5.320 GHz, 5.745 ~ 5.825 GHz
LAN port	1
Number of Radio	1
Operating Channels	IEEE802.11 b/g: 1~11 Channels (America), 1 ~ 13 Channels (General Europe), 1 ~ 14 Channels (Japan) IEEE802.11a: 4 Channels (Japan), 19 Channels (Europe), 18 Channels (USA)
Modulation	OFDM (64-QAM, QPSK, BPSK / DSSS (DBPSK, DQPSK, CCK)
Transmit Power 802.11a**	19dBm @ 6-24Mbps, 18dBm @ 36Mbps, 17dBm @ 48Mbps, 16dBm @ 54Mbps
Transmit Power 802.11g**	25dBm @ 6-24Mbps, 23dBm @ 36Mbps, 22dBm @ 48Mbps, 21dBm @ 54Mbps
Transmit Power 802.11b**	25dBm
Receiver Sensitivity 802.11a	-92dBm @ 6-24Mbps, -80dBm @ 36Mbps, -76dBm @ 48Mbps, -72dBm @ 54Mbps
Receiver Sensitivity 802.11g	-92dBm @ 6-24Mbps, -80dBm @ 36Mbps, -76dBm @ 48Mbps, -72dBm @ 54Mbps
Receiver Sensitivity 802.11b	-96dBm @ 1Mbps, -95dBm @ 2Mbps, -93dBm @ 5.5Mbps, -92dBm @ 11Mbps
Software	
Wireless	802.11R IEEE 802.11a IEEE 802.11 b/g Country Selection: FCC, ETSI, Japan SSID assignment Client BSSID assignment WMM Support Bandwidth Control: UP/DOWN kbps 802.11g Only Support TPC (Transmit Power Control) Support: 5 Steps RSSI (dBm) RF Site Survey Burst Mode Maximum Range (Use of External Antenna): 50km
Operation Mode	Client
Security	Http User Name & Password Wireless Encryption: Open, Shared, WPA-PSK, WPA2-PSK, WPA & WPA2, 64bit/128bit/256bit WEP, TKIP, AES-CCMP Support
Management	HTTP Web Based Configuration (IE) IP Alias Configuration File Backup / Restore SNMP v1, v2c, 802.11 Mib Host Name
Configuration Retention after FW Upgrade	Yes
DHCP Client	Yes
VPN Pass Through	Yes
Network	
Protocols	TCP/IP, RTSP, UDP, IGMP, DHCP, Tags, PPPoE
Maximum Ethernet Clients Supported	64
Compliance	
	

** 2.4GHz Peak Transmit Power Up to 500mW. 5GHz Peak Transmit Power Up to 300 mW.

Dimensions
a. 7.5 inches
b. 4.73 inches
c. 1.84 inches

Interface
1. Status LED
2. Type N Antenna Interface
3. RJ45 Female Power over Ethernet Power



ACCESSORIES

PIS200
Dual-Port DC PoE Injector with Surge Suppressor



PES100
1-Port PoE Surge Suppressor



LSS0001
RF Lighting Arrestor (0 to 6GHz)



WC002
Waterproof Connector Set



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



WC Series
Outdoor UV protected Cat5 Network Cable



OA Series Omni-Directional Antenna



OA09 2.4GHz 9dBi

PA Series Panel Antenna



PA21 2.4GHz 21dBi

PA5G18 5GHz 18dBi

SA Series Sector Antenna



SA1821 2.4GHz 18 - 21dBi

GA Series Parabolic-Grid Antenna



GA5G24 5GHz 24dBi

COMPATIBILITY

- AirEther SB54
Dual Band Outdoor
Wireless Bridge, Access Point, Repeater

PACKAGE CONTENT

1. SC54
2. AC/DC Power Adapter
3. WC002 Weatherproof Connector Set
4. PIP100 1-Port DC PoE Injector
5. Resource Kit Disc
6. Pole Mount Bracket System
7. Installation Guide and Warranty



THE LEADING
OUTDOOR NETWORK
APPLIANCE COMPANY

Product Information Online: <http://www.inscapedata.com/sc54.htm>

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Total Turnkey Solutions for Outdoor PoE, Wired/Wireless, and IP Video Applications