

BreezeNET DS.11 Wireless Bridging

Panning the airwaves

The BreezeNET family of products provides efficient, cost effective point-to-point and point-to-multipoint networking optimized for building-to-building connectivity, covering distances of up to 25 km (15 miles) in harsh and adverse environments and weather conditions.

BreezeNET is the ideal solution for connecting buildings, campuses, industrial zones and remote sites, ensuring enterprise and community-wide network connectivity.

Providing an indoor-outdoor architecture wireless infrastructure for optimal range and capacity, BreezeNET DS.11 leverages Direct Sequence Spread Spectrum technology, which is ideally suited for fast and consistent building-to-building connectivity, providing optimal service to broadband applications in co-located fixed LAN environments.

DS.11 is designed to transmit in the unlicensed 2.4 GHz bands, which combined with the use of low cost cabling, easy installation, rapid scalability and seamless integration into existing Ethernet networks, ensures maximum cost efficiency.

Featuring quick and easy network installation and SNMP remote management, DS.11 is immediately deployed and scales easily to the changing needs of the network environment. BreezeNET ensures uncompromising security to prevent hacking, data theft and hostile intrusions.



Product Highlights

BreezeNET DS.11 delivers a comprehensive range of product features, ensuring fast, consistent and reliable networking services, including...

- Indoor-outdoor architecture ensures unprecedented range and reliability.
- Data rates of up to 11 Mbps.
- Range of up to 25 km (15 miles).
- Maximum sensitivity.
- Compatibility with any standard Ethernet switch and router.
- Full LED diagnostics, featuring 10-LED RSSI bar display for easy antenna alignment.
- Built-in remote diagnostics, which minimize maintenance and maximize savings.
- IEEE 802.11b, IEEE 802.3 and Wi-Fi compliance.
- Wired Equivalent Privacy (WEP) using the RC4 encryption algorithm as defined in the IEEE 802.11 standard.

BreezeNET DS.11 System Components

BU-DS.11 Base Unit	Connects directly to the 10Base-T Ethernet backbone using a RJ-45 connector and links the central network point to up to 128 remote sites.
RB-DS.11 Remote Bridge	Connects directly to the 10Base-T Ethernet backbone using a RJ-45 connector and links a remote Ethernet network to the central point via the Base Unit, servicing up to 1024 stations.



BreezeNET DS.11 - Record-breaking reach, superb reliability

BreezeCOM and Floware unite



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Specifications

Radio

Frequency Range	2.4 - 2.4835 GHz ISM band (ETSI, FCC)		
	2.4-2.4835 GHz (Japan)		
Radio Type	Direct Sequence Spread Spectrum (DSSS)		
Wireless LAN Standards	Compliant with IEEE 802.11b HR		
Selectable sub Channels	FCC	1-11	
	ETSI	1-13	
	Japan TELEC	1-13	
	France	10-13	
Output Power (at the antenna port)	FCC	-4, -2, 4, 6, 12, 14, 20, 24 (dBm)	
	ETSI	-4, -2, 4, 6, 12, 14 (dBm)	
	Japan TELEC	-4, -2, 4, 6, 12, 14 (dBm)	
Sensitivity (BER 1E10-6)	Data Rate	Sensitivity	Modulation
	11 Mbps	-85 dBm	256 CCK
	5.5 Mbps	-88 dBm	16 CCK
	2 Mbps	-90 dBm	DQPSK
	1 Mbps	-93 dBm	DBPSK
Processing Gain	10.4 dB Nominal		
Integrated Antenna Type	Flat Panel 16 dBi, 20° Vertical /Horizontal		

Range

Europe/ ETSI (20 dBm EIRP)	Up to 10 km
US FCC	Up to 25 km (15 miles)

Security

Authentication and Data Encryption	RC4 WEP
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Configuration and Management

Management and Setup	SNMP based enhanced windows platform configuration utility	
Site Survey Tool	Integrated into the configuration utility	
SNMP Agents	MIB II, Bridge MIB, DS.11 Private MIBs	
Software Upgrade	Simultaneous multiple units software upgrade using the configuration utility	
	TFTP download	
LED Indicators	Indoor Interface Unit	Outdoor Unit
	Power status	Power Status
	End-to-end Ethernet status	10-LED display bar: RSSI in the RB/ Load Gauge in BU Ethernet Status / Traffic Wireless Link Status / Traffic

Outdoor Unit-to-Indoor Unit Communication

Cable Type	Cat 5 FTP 4x2x24 Double Jacket
Maximum Cable length between indoor and outdoor units	90 m (280 feet)

Interfaces

RF (antenna) connector in the outdoor unit	N-Type jack, lightning protected
Baseband (indoor-to-outdoor units)	Outdoor units: Shielded RJ-45 with special water proof sealed cap Indoor units: Shielded RJ-45
Ethernet	Indoor units: 10BaseT, (RJ-45) with 2 embedded LEDs

Electrical

Power Consumption	110 / 220 V 500 / 250 mA
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Mechanical Dimensions

Outdoor Unit	30.5 x 12 x 5 cm	12 x 4.7 x 2 in
Outdoor Unit with Integrated Antenna	30 x 30 x 7.2 cm	12 x 12 x 2.8 in
Indoor Unit	15.4 x 8.4 x 5.6 cm	6.1 x 3.3 x 2.2 in

Environmental

Operating Temperature	Indoor unit: 0°C to 40°C Outdoor unit: -40°C to 55°C
Operating Humidity	5% to 95% non-condensing. Outdoor units are weather protected

Standards Compliance, General

EMC	EN 300-385, FCC Part 15
Safety	EN 60950, UL 1950
Environmental	ETS 300 019, Bellcore GR-63-CORE
Wireless LAN Standards	ETSI ETS 300 328, FCC Part 15