

Specifications



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BREEZECOM
Wireless Access Solutions

	AP-10, SA-10, SA-40, WB-10, & Model D bridges	SA-PCR / SA-PCD
PRODUCT FEATURES		
Data rate	Up to 3 Mbps	Up to 3 Mbps
Net throughput	Up to 1.9 Mbps	Up to 1.6 Mbps
Aggregate	Over 15 Mbps (overlapped cells)	
RANGE		
Integrated antennas	900m (3,000 ft)	600m (2,000 ft)
External antennas	up to 5km ETSI, 8mi US/FCC	
With amplifiers	up to 50km (30mi)*	
Office environment	150m (500ft)	150m (500ft)
High speed roaming	Up to 90km/h (60mph)	Up to 90km/h (60mph)
No. of APs per wired LAN	Unlimited	
Max. no. of collocated cells (APs)	15	
Load sharing support	Yes	Yes
WIRED LAN INTERFACE		
Compliant with	Ethernet/IEEE 802.3	Type II slot
Physical interface	10BaseT	Type II slot
Connector type	RJ-45	Type II slot
Networks Operating Systems	All	Win 95, 98, NT, CE, NetWare, Linux, DOS, NDIS 4, NDIS 3, ODI
Network Drivers		NDIS 4, NDIS 3, ODI
WIRELESS LAN INTERFACE	Compliant with IEEE 802.11	Compliant with IEEE 802.11
RADIO SPECIFICATIONS		
ModulationType	Frequency Hopping Spread Spectrum	Frequency Hopping Spread Spectrum
Frequency Range	2.4 GHz - 2.4835 GHz ISM band	2.4 GHz - 2.4835 GHz ISM band
Antenna System	Dual diversity	Dual diversity
Transmitted Power		
Integrated antennas	10 mW or 100 mW (20 dBm) EIRP	100 mW (20 dBm) EIRP
External antennas	50 mW (17 dBm) at the connector Up to 36 dBm EIRP for 24 dBi antenna	
Sensitivity (at 1/2/3 Mbps)	-83/-75/-67 dBm	-83/-75/-67 dBm
Modulation	2, 4, 8 Multilevel GFSK	2, 4, 8 Multilevel GFSK
Demodulation	DSP based w/adaptive equalization	DSP based w/adaptive equalization
Approvals of Compliance	FCC part 15, ETS 300-328, UL, UL/C, TUV/GS, CEUL,	FCC part 15, ETS 300-328, UL/C,TUV/GS, CE
MANAGEMENT		
Configuration and Setup	local monitor port (serial RS-232) and SNMP	PC-based software
Site Survey	local monitor port (serial RS-232)	PC-based software
LED indicators	Power on, Wired LAN activity, Wireless LAN synchronization, Wireless LAN signal Quality/load	Link status, data traffic
SNMP management	Yes	n/a
S/W upgrade	Yes, using TFTP download	Yes, using PC
ELECTRICAL		
External power supply	100 V - 250 V, 50 - 60 Hz 0.5 A	From PCMCIA slot
Input Voltage	5 VDC	5 VDC
Power Consumption	1.5 A (peak)	TX: 360 mA/RX: 285 mA (peak)
Power Save Mode		Avg. TX & RX less than 30 mA
SIZE & WEIGHT		
Dimensions (w/o antennas)	13cm x 8.6cm x 3.4cm (5.1" x 3.4" x 1.35")	Standard PCMCIA Type II
Weight	0.4 kg (0.9 lb)	32g (1.1 Oz)
ENVIRONMENTAL		
Operating Temperature	0°C - 40°C (32°F - 105°F)	0°C - 40°C (32°F - 105°F)
Operating Humidity	5% - 95% non condensing	5% - 95% non condensing

* dependent on country regulations

www.breezecom.com

BreezeNET® Wireless LAN



PRO11-811022

BreezeNET® PRO.11 Wireless Networking

BreezeNET is a leading wireless networking solution. As network requirements change, as new locations open, for temporary network access, and as the number of mobile users increases, BreezeNET provides quick connectivity anywhere.

Since the BreezeNET PRO.11 family adheres to the IEEE 802.11 standard, it works seamlessly with other 802.11 Frequency Hopping wireless LAN products, and its open architecture supports any standard computer platform including PCs, Macs, Unix workstations and pen tablets — and any other device with an Ethernet connection.

With BreezeNET PRO.11 you finally realize the benefits of flexible, plug-and-play network connections, that maintain mobility and accommodate temporary, ad-hoc, building-to-building, in-building and Internet connections.

Applications Unlimited

BreezeNET provides an ideal wireless solution for both outdoor and indoor applications, satisfying a wide range of customers: from small to large corporate enterprises, campuses, educational and medical institutions, transportation, manufacturing, retail and warehouse facilities, municipalities, temporary venues, Internet Service Providers and remote offices. BreezeNET's versatility surpasses the limitations of wired networking.

- IEEE 802.11 and IEEE 802.3-compatible
- WEP-Wired Equivalent Privacy (RC4 encryption & authentication)
- Form factor sized PCMCIA card with retractable diversity antennas
- PCMCIA card - ability to function as an access point
- Load balancing – balances the load among collocated access points
- High speed roaming
- Connects to any standard Ethernet port
- Power saving enables handheld devices longer battery life

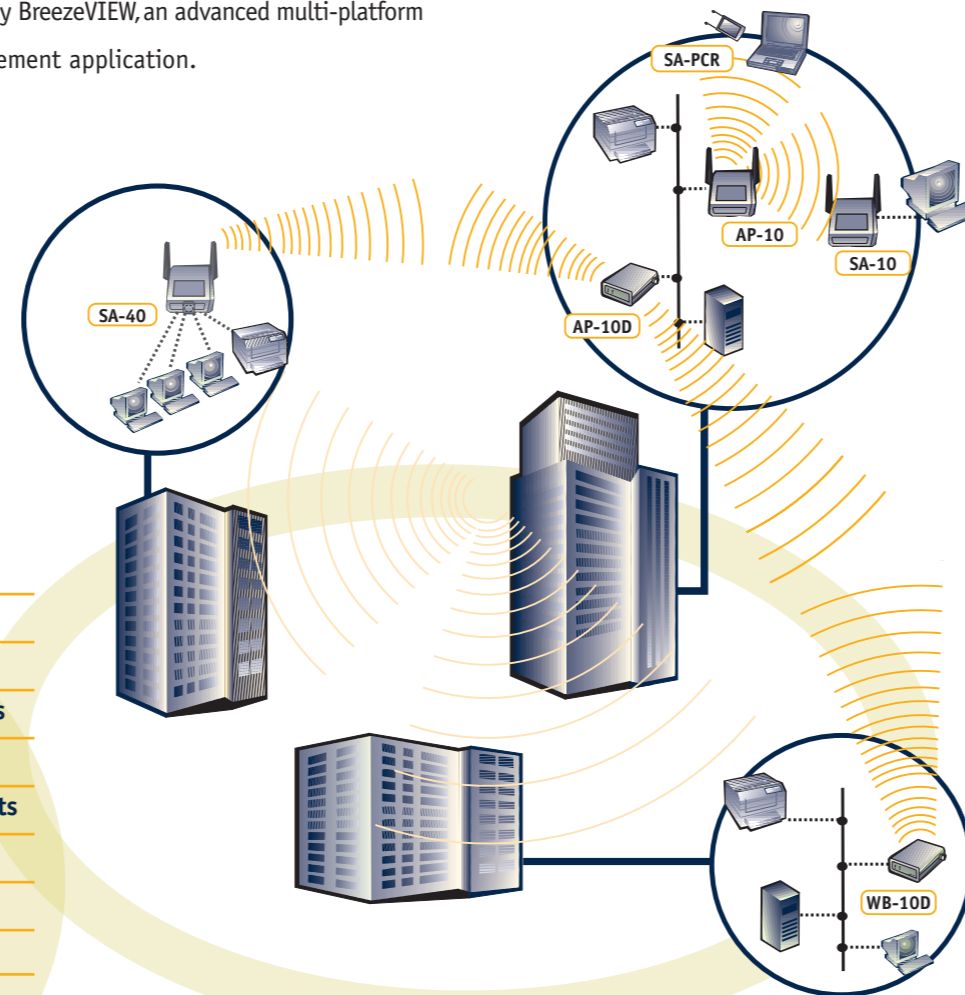
Performance and Reliability to the Max

BreezeNET PRO.11 products are designed for maximum performance and reliability. Operating in the 2.4 GHz unlicensed ISM band, BreezeNET offers data rates of up to 3 Mbps, at distances of up to 50km (30mi)* outdoors, 150m (500ft) indoors, and roaming speeds up to 90km/h (60mph).

BreezeNET's antenna diversity technology ensures robust and high quality reception.

Easy Installation and User Friendly

Installing BreezeNET PRO.11 is easy and speedy. Network managers can easily add it to existing networks. The wireless network is operable in a fraction of the time it takes to cable and install traditional wired Ethernet networks. In addition, BreezeNET can be managed by BreezeVIEW, an advanced multi-platform SNMP management application.



BreezeNET PRO.11 Products

Employing frequency hopping spread spectrum technology, the BreezeNET PRO.11 products are ideal for environments with high user density such as enterprises and campus networks. Two product categories are available:

- **Outdoor** – models with antenna connectors (D Models)
 - **Indoor** - models with integrated antennas
- All are software upgradeable to the latest features, allowing the BreezeNET wireless network to grow and change as needs dictate. A large variety of antennas and accessories are supported for the requirements of different applications.

AP-10 / AP-10D Access Point:

The Access Point is a wireless hub that allows the wireless station adapters to communicate over the network. Used as a wireless extension to a wired network or alone as a totally wireless network, the AP-10 connects directly to the 10Base-T Ethernet backbone via an RJ-45 connector. The AP-10 transmits data from the wired LAN and server resources to the wireless clients, who can be stationary or mobile. With a data rate of up to 3 Mbps and a transmission range up to 50 km (30 mi) in open space, or 150m (500ft) in enclosed space, an aggregate backbone data rate up to 15 Mbps using a multicell configuration is provided.

SA-PCR / SA-PCD PC Card: At a data rate up to 3 Mbps and an indoor range up to 150m (500ft), SA-PCR card is the best performing IEEE 802.11-compliant, Frequency Hopping card available. Its specialized zero form factor and uniquely retractable and flexible wire antennas eliminate possibility of breakage or damage. This SA-PCR is the ultimate PC card for mobile client device users. Additionally, the SA-PCR card functions as an access point, supporting connectivity of additional multiple users. The PC card is designed to support all popular operating systems. This PC card is also available with detached antennas (SA-PCD), to be embedded in hand-held devices.

SA-10 / SA-10D and SA-40 / SA-40D Station Adapter:

These universal client adapters (a single-port and a 4-port wireless "mini-hub") connect to any RJ-45 10BASE-T Ethernet port, providing a true plug-and-play wireless solution for all computing and peripheral devices, without the need to install additional drivers or configure the hardware.

WB-10 / WB-10D Workgroup Bridge:

Connects a remote Ethernet network, wired or wireless, to an AP-10 Access Point, handling high volume network traffic.



The Benefits of Frequency Hopping:

- Excellent Multi-Path Rejection
- High Radio Density and Scalability
- Simple Deployment - No Frequency Planning Required