BROCADE MOBILITY 300 ACCESS POINT

CAMPUS NETWORK

Plug-and-Play 802.11a/b/g Access Points for Secure Wireless Enterprises

HIGHLIGHTS

- Provides greater functionality at a much lower cost than typical access points
- Delivers seamless mobility in conjunction with enterprise WLAN switches
- Can execute and enforce switch-based IDS/IPS security policies
- Functions as a 24×7 dedicated sensor with AirDefense IPS for Brocade Mobility
- Enables true wireless VLANs for improved device and network performance
- Supports load balancing, pre-emptive roaming, and rate scaling for more efficient operations
- Provides Power over Ethernet (PoE) support for simplified installation

Access points are a key component of the industry-leading Brocade® wireless switch system, the Wireless LAN (WLAN) architecture that does more, yet costs less. Working in conjunction with Brocade wireless controllers, the Brocade Mobility 300 Access Point provides robust and feature-rich IEEE 802.11a/b/g connectivity. It can also be used as:

- A sensor in conjunction with the AirDefense® Intrusion Prevention System (IPS) for Brocade Mobility
- Either a Layer 2 or Layer 3 access point, supporting Layer 3 mobility

With this level of flexibility, the Brocade Mobility 300 substantially reduces the cost of deploying, implementing, and managing a wireless LAN while significantly increasing the functionality and security of the wireless LAN infrastructure.

With Virtual AP, each access point can support four separate wireless broadcast domains—functionality that would otherwise require the installation of four first-generation access points. These true wireless VLANs provide secure isolation of specific mobile users, helping to ensure that broadcast traffic reaches only those recipients for whom it is intended. This

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approach reduces overall network traffic, improves network and device performance, and increases device battery life—at a fraction of the cost required to deliver the same functionality in a first-generation access point network.

Each Brocade Mobility 300 supports four Basic Service Set Identifiers (BSSIDs) and 16 Extended Service Set Identifiers (ESSIDs) per radio, enabling granular segmentation of the wireless LAN into multiple broadcast domains to meet specific enterprise requirements. This design is much more effective than that of typical access points, which support only one BSSID and utilize ESSIDs (instead of BSSIDs) to create wireless VLANs.

DUAL-RADIO 802.11a AND 802.11g DESIGN

Simultaneous service to 802.11a, 802.11b, and 802.11g mobile devices provides high-bandwidth wireless connectivity at speeds of up to 54 Mbps in both the 2.4 GHz and 5.2 GHz ISM bands.

THIN ACCESS POINT DESIGN

The Brocade Mobility 300 requires no configuration or manual firmware maintenance. The Brocade wireless controller discovers access points on the network and automatically downloads all configuration parameters and firmware, greatly reducing installation, maintenance, and troubleshooting costs for Layer 2 and Layer 3 deployments.

SERVICES FOR AN END-TO-END SOLUTION

Brocade Global Services offers comprehensive customer support for Brocade enterprise wireless LAN products, including hardware and 24×7 software support, along with software updates and new releases.

MAXIMIZING INVESTMENTS

To help optimize technology investments, Brocade and its partners offer complete solutions that include education, support, and services. For more information, contact a Brocade sales partner or visit www.brocade.com.

BROCADE MOBILITY 300 SPECIFICATIONS

Physical characteristics (internal antenna)

Dimensions	9.5 in. L × 7.0 in. W × 2.0 in. H (24.1 cm × 17.8 cm × 5.1 cm)
Weight	1.0 lbs. (0.45 kg)
Available mounting configurations	Ceiling mount (to suspended ceiling T-bars, below tile); wall mount
Plenum-rated	No
LED indicators	Two LED indicators with multiple modes indicating 802.11a/802.11g activity, power, sensor, adoption, and errors

Physical characteristics (external antenna)

Dimensions	9.3 in. L × 5.8 in. W × 1.0 in. H (23.5 cm × 14.6 cm × 2.54 cm)
Weight	1.6 lbs. (0.7 kg)
Available mounting configurations	Ceiling mount (above tile); wall mount
Plenum-rated	Yes, certified to UL 2043
LED indicators	Two LED indicators with multiple modes indicating 802.11a/802.11g activity, power, sensor, adoption, and errors

Wireless data communications and networking

Data rates supported	802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
	802.11b/g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps
Network standards	802.11a, 802.11b, 802.11g
Wireless medium	Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM)
VLANs/WLANs supported	Brocade Mobility RFS6000: 32 VLANs/32 WLANs
	Brocade Mobility RFS7000: 256 VLANs/256 WLANs
Uplink	Auto-sensing 10/100 Base-T Ethernet

Radio characteristics

Frequency	802.11b/g: 2.412 GHz to 2.484 GHz; 802.11a: 4.9 GHz to 5.875 GHz
FCC (US and Canada)	2.412 to 2.462 GHz; 5.150 to 5.250 (UNII -1); 5.725 to 5.850 (ISM)
EU	2.412 GHz to 2.472 GHz; 5.250 to 5.350 GHz (country-specific)
Japan	2.400 to 2.484 GHz; 5.150 to 5.250 GHz; 5.250 to 5.350 GHz
China	2.412 GHz to 2.472 GHz (internal antenna)
	5.725 GHz to 5.850 GHz (external antenna)
Operating channels	802.11b/g: ETSI: 13; North America: 11; TELEC (Japan): 13
	802.11a: ETSI: country-specific; North America: 12; UNII I, II, III; (approval for 5.4 to 5.7 GHz pending); TELEC (Japan): 8
Available transmit power settings for 802.11a/b/g	4 to 20 dBM

Receiver sensitivity

Receiver sensitivity	802.11b (-dBm)		802.11g (-dBm)		802.11a (-dBm)	
	1	-96	6	-92	6	-91
	2	-93	9	-89	9	-88
	5.5	-92	12	-87	12	-86
	11	-87	18	-86	18	-86
			24	-83	24	-83
			36	-78	36	-77
			48	-74	48	-74
			54	-72	54	-72

Environmental

Temperature	Operating: 32°F to 104°F (0°C to 40°C) for internal antenna
	Operating: –4°F to 122°F (–20°C to 50°C) for external antenna
	Non-operating: –40°F to 158°F (–40°C to 70°C)
Operating humidity	5% to 95% (without condensation)
Altitude	Operating: 8000 ft. (2438 m)
	Non-operating: 15,000 ft. (4572 m)
Electrostatic discharge	+/- 15 kV (air), +/- 8 kV (contact)

Power specifications

Operating voltage	48VDC at 7W (typical), 36VDC to 57VDC (range)
Operating current	145mA at 48VDC (typical)
Integrated Power over Ethernet (PoE)	Standards-based IEEE 802.3af

Antenna specifications

Type	Integrated 2.4 GHz and 5.2 GHz dual antenna; elements with diversity (internal antenna)
	Two RSMA and two RBNC connectors for external antennas (not included)
Band	2.4 GHz to 2.5 GHz; 4.9 GHz to 5.850 GHz (actual operating frequencies depend on regulatory rules and certification agency)
Voltage Standing Wave Ratio (VSWR)	2.4 GHz: less than 2:1; 5.2 GHz: less than 1.5:1 (internal antenna)
	Antenna-specific (external antenna)
Gain	2.4 GHz: 2 dBi; 5.2 GHz: 3.8 dBi (internal antenna)
	Antenna-specific (external antenna)

Regulatory

Product safety	UL 60950, cUL, EU EN 60950, TUV, and UL 2043 (external antenna)
EMC compliance	FCC (USA), Industry Canada, CE (Europe), and TELEC (Japan)

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