BelAir NETWORKS

BelAir100N
Wireless Access Point

The BelAir100N AP is the industry's highest performance and most flexible dual radio concurrent wireless AP. It includes two 802.11n radios that can support both 2.4 GHz and 5 GHz, and can be AC or DC/PoE powered. In addition to Wi-Fi frequencies, the BelAir100N can also accommodate 4.9 GHz Public Safety and 5.9 GHz ITS spectrums. Building on BelAir Networks experience with the world's largest Wi-Fi networks, the BelAir100N provides unparalleled support for high capacity data, voice and video applications.

Dual radio architecture

The dual radio design of the BelAir100N supports wireless access at both 2.4 GHz and 5 GHz for broadband mobile wireless applications or a combination of access and wireless mesh or point to point backhaul. It is deployed by service providers and in private networks. The high performance radios offer a world class user experience for mobile data, mobile multimedia and fixed mobile convergence applications.

802.11n Radios

The BelAir100N integrates two IEEE 802.11a/b/g/n compliant radios, supporting 2X2 (two Transmit, two Receive) MIMO operation at 2.4 GHz and 4.9 – 5.9 GHz. Built to IEEE standard 802.11n specifications, the BelAir100N supports a maximum concurrent rate of 600 Mbps.

BelAirOS

The integrated BelAirOS operating system includes software modules that deliver scalable high speed microcellular mobility, state-of-the-art edge policy enforcement, with centralized authentication, touchless automatic configuration, hugely scalable monitoring and diagnostics and end-to-end quality of service (both over the air and on the network).

Networking Capabilities

The BelAir100N has an integrated Layer 2 switch engine that provides extensive QoS, VLAN, network security and traffic management capabilities that are necessary for transporting mission critical, time-sensitive applications like voice and video.

Features
- Modular dual radio architecture
- Supports 802.11a/b/g/n Wi-Fi
- Seamless mobility for uninterrupted service
- Network management via CLI, WEB or BelView NMS
- 10/100/1000 BASE-TX Ethernet interfaces
- 100BaseFX option
- AC or DC/PoE option

Radio modules
- Radios can operate in multiple frequency bands and can be deployed in combination to support access and/or backhaul:
2.4 GHz Radio Module
-2400 – 2483.5 MHz
4.9-5.9 GHz Radio Module (can operate in any of these bands)
- 4940 – 4990 MHz
- 5250 – 5350 MHz
- 5725 – 5850 MHz
- 5850 – 5925 MHz

Antennas
- Radios can be duplexed into pair of dual band antennas or separated into two pairs, as required
- Several internal and external antenna options are available

Network Management

The BelAir100N can be managed via a Command Line Interface (CLI), WEB GUI or with BelAir Networks BelView network management. Both CLI and WEB GUI provide device level support, while BelView provides complete network-wide support for fault, configuration and performance management. BelView works on either Windows XP or SUN Solaris platforms. The BelAir100N and BelView can also be integrated into other management systems like HP OpenView or IBM NetView.

BelAir Networks is the market share leader in Service Provider Wi-Fi solutions. The company's portfolio of indoor and outdoor wireless LAN access points, control and management systems enable service providers, government and businesses to deliver high performance, scalable and flexible managed Wi-Fi services to both enterprise and public users. BelAir Networks solutions provide a compelling return on investment and address the need for public Wi-Fi hot spots and hotzones, secure wireless LAN, cellular data offload, wireless backhaul and video surveillance. Innovative cable, telecom and mobile service providers use BelAir Networks to drive revenue and improve competitiveness.

Networking
- 1-port 10/100/1000 BASE-TX (Cat. 5 RJ-45)
- 1-port 100 BASE-FX option
- IEEE 802.1D MAC bridging
- IEEE 802.1Q VLANs
- IEEE 802.1w (RSTP) & IEEE 802.1s (MSTP)
- IEEE 802.1p prioritization with 4 queues
- L2TP and L2VPN with redundant tunnels
- 16 SSIDs per AP, 8 SSIDs per access radio. MSSID support for 8 virtual APs per access radio
- Support for SNTP, ICMP, HTTP, ARP, TCP, UDP, Telnet,

Management
- Secure local and remote access
- Command line, HTTP and HTTPS Web GUI, SNMPv1/v2/v3 and SSHv2 management interfaces

- MIBs: MIB-II, SNMPv2, 802.11, Ethernet-like, Interface Group
- Multiple user privilege levels with RADIUS authentication
- Firmware upgrade through TFTP with support for automatic rollback
- RADIUS accounting

Security
- Authentication: 802.1x (RADIUS), EAP and UAM (WISPr) methods
- Encryption: WEP 64 and 128 bit, TKIP / MIC per 802.1x, 802.11i AES
- MAC address access control lists
- Rogue AP detection

Approvals
- Radio: FCC part 15.247C, part 15.407, part 90 (PSB), part 90 (ITS), part 90 subparts Y and M, EN 300-328, EN 301-893, IR2005/IR2006/IR2007, Industry Canada RSS 210 Issue 7, RSS 211 Issue 2
- EMC: FCC 47 CFR part 15, subpart B Class B and EN 301 489-1/-17 Class B
- Safety: ANSI/UL std no.60950-1, CSA-C22.2 std no. 60950-1,CB-60950-1
- RF safety: FCC OET Bulletin 65, Health Canada Safety code 6
- Outdoor use: IP67/NEMA4X for wet and dusty conditions
- CE! mark

Physical and Electrical
- Size: 7.5 in. (19 cm) high x 13 in. (33 cm) wide x 5.5 in. (14 cm) deep
- Weight: 12 lbs (5.5 kg)
- Typical power consumption: 24 Watts
- Power supply: 100 to 240 V AC, 47 to 63 Hz
- Power supply: -40 to -72 V DC/PoE variant also available
- Available wall or pole mounting kits with theft deterrent anti-tamper screws
- Power, radio and Ethernet lamps

Protection circuits
- IEC 60000-4-5 level 4 surge
- GR1089 - 6 kV (3000 A) surge

Environmental
- Operating temperature: -40°C to +65°C (no heaters required)
- Storage temperature: -40°C to +80°C
- Operating humidity: 5 to 95% non-condensing
- Shock and vibration: ETSI300-019-1-4

BelAir
NETWORKS

To find out more, contact BelAir Networks:
info@belairnetworks.com
sales@belairnetworks.com
1-877-BelAir1 (1-877-235-2471)
1-613-254-7070
www.belairnetworks.com

BDMA10100-A01