



BelAir I00SN Strand-Mounted Wireless Access Point

The BelAir I00SN is a two-radio wireless access point (AP) designed for mounting on existing cable infrastructure, including aerial plant, pedestal, vault and cabinet installations. It supports DOCSIS 3.0 and Euro-DOCSIS 3.0 interfaces, 802.11n radios, and is plant powered at 40 to 90 VAC. The BelAir I00SN provides mobile broadband support for Wi-Fi, 4.9 GHz Public Safety and 5.9 GHz ITS. Offering true standards-based seamless mobility, the BelAir I00SN ensures that subscribers do not experience service interruptions to critical applications like voice and video as they move throughout the wireless network.

Dual-radio architecture

The dual radio design of the BelAir I00SN supports wireless access at both 2.4GHz and 5GHz for broadband mobile wireless applications. It is deployed by service providers wishing to add a primary wireless mobile offer to their service bundle for customer retention or churn reduction, or for wireless operators wishing to offload their existing 2G/3G/4G networks. The high performance radios offer a world class user experience for mobile data, mobile multimedia and fixed mobile convergence applications. The BelAir I00SN supports a DOCSIS modem for network connectivity as well as an Ethernet port. The radios can also operate as wireless backhaul for plant extension.

The integrated BelAirOS supports software modules that deliver scalable high speed microcellular mobility, edge policy enforcement, IP tunneling, secure wireless access, touchless automatic configuration, monitoring and diagnostics and quality of service (both over the air and on the network).

802.11n radios

The BelAir I00SN 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 BelAir I00SN supports a maximum concurrent PHY rate of 600 Mbps.



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
- DOCSIS 3.0 and Euro-DOCSIS 3.0

Radio modules

- Radios are available in multiple frequency bands and can be deployed in combination to support access and/or backhaul:
 - 2400 – 2483.5 MHz
 - 4940 – 4990 MHz
 - 5250 – 5350 MHz
 - 5725 – 5850 MHz
 - 5850 – 5925 MHz
- Duplexed radios into pair of dual band Antennas (other options available)

Layer 2 networking capabilities

The BelAir I00SN 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.

Network Management

The BelAir I00SN can be managed via a Command Line Interface (CLI), WEB GUI or with BelAir Networks BelView Network Management System (NMS). Both CLI and WEB GUI provide for device level support, and BelView NMS provides complete network-wide support for Fault, Configuration and Performance Management. BelView NMS works on either Windows XP or SUN Solaris platforms and 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)
- DOCSIS 3.0, Euro-DOCSIS 3.0
- 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 with redundant tunnels
- 16 SSIDs per AP, 8 SSIDs per access radio. MSSID support for 8 virtual APs per access radio
- Support for SNMP, ICMP, HTTP, ARP, TCP, UDP, Telnet, TFTP and IP traffic

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) and EAP 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: IP66/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 7 in. (17.8 cm) deep
- Weight: 17.5 lbs (8 kg)
- Typical power consumption: 28 Watts
- Power supply: 40 to 87 V ac quasi-square wave, 47 to 63 Hz, through KS threaded interface
- Product shipped with F-adapter
- Power, radio and Ethernet LEDs

Protection circuits

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

Environmental

- Operating temperature: -40°C to +50°C
- Storage temperature: -40°C to +80°C
- Operating humidity: 5 to 95% non-condensing
- Shock and vibration: ETSI300-019-1-4

BelAir
NETWORKS

Copyright© 2010 BelAir Networks. BelAir Networks products and associated technology are protected by one or more of the following US patents: 7,171,223 / 7,164,667 / 7,154,356 / 7,030,712 / D501,195 / 7,545,782 / 7,433,343 / 7,162,234 / 7,433,361

To find out more, contact BelAir Networks:

info@belairnetworks.com
sales@belairnetworks.com
1-877-BelAir | (1-877-235-2471)
1-613-254-7070
www.belairnetworks.com

BDMA10090-A01