Airvenue BA50C Wireless Mesh Node

The BA50C is a single-radio wireless mesh node that can be quickly and economically deployed to deliver the lowest cost broadband coverage. It also integrates seamlessly with Airvenue Networks dual and multi-radio nodes to deliver three times the performance at the same price as traditional single-radio nodes. This integration ensures deployment flexibility to address current requirements while providing a future-proof evolution as the network grows to accommodate more users and applications.

The BA50C features a rugged outdoor enclosure, a 100-Mbps Ethernet port, two 8-dBi omni-directional antennas and a high-powered Access Radio Module optimized to provide coverage over large areas. Battery back-up power supply, brackets for pole or wall mounting, and a high-performance network processing core are standard on all BA50C nodes. The BA50C node provides Wi-Fi access to standard 802.11b or 802.11g client devices and connects with other Airvenue nodes by forming a wireless multipoint-to-multipoint mesh.

Layer 2 networking capabilities

The BA50C 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 BA50C can be managed via a Command Line Interface (CLI), WEB GUI or with Airvenue Networks View Network Management System (NMS). Both CLI and WEB GUI provide device level support, and View NMS provides complete network-wide support for Fault, Configuration and Performance Management. View 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.

Airvenue Networks is the leading provider of mobile broadband mesh networking solutions. Cities around the world rely on Airvenue to deliver industry-leading broadband performance and scalability, and carrier-class capacity and reliability. Airvenue Networks teams with world-class global partners to deploy proven, cost-effective wireless broadband mesh networks.

Features

- Low-cost broadband coverage
- Quick and easy to deploy and manage
- Seamless integration with dual and multi-radio nodes

Radio module options

Radio module options

- Access Radio Module (ARM) IEEE 802.11b/g, 2.4 GHz

Networking

- 1-port 10/100BASE-TX
- IEEE 802.1D MAC Bridging
- IEEE 802.1Q VLANs
- IEEE 802.1w (RSTP) and IEEE 802.1s (MSTP)
- IEEE 802.1p prioritization with 4 queues
- L2TP Tunneling for seamless mobility
- 15 SSIDs per access radio. MBSSID support for 8 virtual APs per access radio
- Support for SNTP, 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

Protection circuits

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

Approvals

- Radio: FCC part 15, EN 300 328 and Industry Canada RSS 210 Issue 5
- 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: IP56/NEMA4/NEMA4X for wet and dusty conditions
- CE! mark
- Korea: MIC2003-15
- Russia: GOST-R
- India: ETA-74/2005, ETA-78/2005
- Taiwan: LP00002, ETC094LP0425, ETC094LPD0426, ETC094LPD0426a

Physical and Electrical

- Size: 12 in. (30.5 cm) high x 7.25 in. (18 cm) wide x 6 in. (15.3 cm) deep
- Weight: 10 lbs (4.5 kg)
- Typical power consumption: 13 Watts
- Power supply: 100 to 240 V ac, 47 to 63 Hz
- Backup 8 V battery
- Battery backup time: 40 minutes typical
- Available wall or pole mounting kits with theft deterrent anti-tamper screws
- Power, radio and Ethernet lamps

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

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