CellNode BRAP

Wireless Outdoor Bridge

SysMaster®

CellNode BRAP-N

● Product Overview

CellNode BRAP is an outdoor wireless bridge that allows multiple clients to connect to local or remote access points using 802.11b/g/n 300Mbps wireless links. The device can function in three modes: Bridge, Relay, and Access Point. In Bridge and Relay modes, CellNode BRAP extends the coverage of traditional access points by connecting multiple access points to a single fixed line (Bridge mode) or by connecting multiple access points to a remote access point (Relay mode). Additionally, CellNode BRAP can function as a traditional access point, providing network access to wireless clients. The device has an integrated 15db directional antenna that allows it to enhance its transmission range. CellNode BRA is designed for outdoors installations and has a built in Power-over-Ethernet (PoE) connection that allows the device to be installed outdoors up to 210 feet (70 meters) away from the client computer or network switch without impact on performance.

● Key Features

- Multiple operating modes to accommodate different network environments
- High data exchange rate of up to 54Mbps
- Secure communication based on 64/128-bit WEP, WPA, WPA2 standards
- Auto rate fallback for improved connectivity in the presence of obstacles or interferences

- User friendly configuration via a web browser
- Extended product life via firmware upgradeability
- Controlled network access via MAC access control
- Enhanced transmission range due to integrated directional antenna
- Remote installation of up to 210 feet from a network switch supported by PoE technology

● Operating Modes

Bridge Mode	Relay Mode	Access Mode
In Bridge mode, CellNode BRAP will relay all signals coming from its Ethernet port to its wireless port and vice versa. This functionality will allow connectivity between LAN and wireless networks. In that mode, CellNode BRAP can be used to connect multiple access points to a wired LAN.	In Relay mode, CellNode BRAP extends the range of wireless networks. The device uses Wireless Distribution System (WDS) technology, allowing it to communicate directly with other access points. This way, a number of secondary access points can connect to a master access point via CellNode BRAP via wireless links.	CellNode BRAP can also function as a traditional access point to provide wireless clients with access to wired networks.

● Technical Specifications

- **Standards:** IEEE 802.11g (DSSS) 2.4GHz specification
- **Operating Frequency:**
  - 2.400 GHz to 2.4835 GHz frequency band
  - 1~14 channels
- **Data rate:** Up to 300Mbps
- **Operating Modes:**
  - Access Point
  - Access Point Client
  - Bridge Point-to-Point
  - Bridge Point-to-Multipoint
  - WDS
  - Repeater
- **Security:** 64/128-bit WEP, WPA, WPA2
- **CPU:** Realtek RTL8186
- **Flash:** 2 MB NOR Flash
- **RAM:** 8MB SDRAM

- **RF:** Realtek RTL8225
- **Interface:** RJ-45 10/100Mbps Port
- **Misc:**
  - Power over Ethernet Injector
  - CAT5/FTP Ethernet Cable (3.5m)
- **Antenna:** Integrated 15db 2.4Ghz
- **Transmit Power:** 18 dBm
- **Certifications:** FCC, CE
- **Configuration:** Web browser
- **Upgradeability:** Firmware
- **Power:** 12V DC, 0.5A
- **Dimensions (H x W x D):** 50 mm x 210 mm x 210 mm
- **Operating Temperature:** -4F to 122F (-20C to 50C)
- **Operating Humidity:** 10% to 90% Non-Condensing

Home PC

Home PC

Home PC

LAN switch

2.4GHz

2.4GHz 5GHz

CellNode BRAP

CellNode M100

WAN