



Wireless speed up to 300Mbps and 3X the coverage of standard 802.11g



BEC 8800N

802.11n VDSL2/ADSL2+ Multi-Service Gateway

The BEC 8800N is an all-in-one VDSL2/ADSL2+ Broadband router that offers users the flexibility of multiple Internet connections and expanded 802.11n wireless coverage. All this is offered while maintaining high-speed broadband access via VDSL2, ADSL2+ or through an Ethernet WAN connection. The BEC 8800 series is equipped with a second Ethernet WAN interface, which can be used to connect to an external broadband modem. This unique feature frees users to add fiber-to-the-home (FTTH) services when they become available. Users can easily enjoy high bandwidth applications such as High Definition IPTV services without changing their home network. A robust Firewall is also built in to provide protection against hacker attacks while the Quality of Service feature prioritizes queues and traffic for support deployment of Triple Play applications such as data, video streaming, high definition television (HDTV), music downloads and interactive gaming.

Flexible Deployment Options

The BEC 8800N provides service operators with a flexible, scalable deployment option optimized to both reduce costs and provide the longest possible lifespan for the investment. The BEC 8800N integrates dual WAN options; a VDSL2/ADSL2+ interface and a second 10/100/1000 Ethernet WAN interface which can be used for broadband connectivity to any other Ethernet broadband device. Operators can now deploy one device to support current and future network migration.

Quality of Service

Quality of Service (QoS) gives users' full control over outgoing data traffic. Priority can be assigned by the router to ensure that important transmissions like gaming packets, VoIP calls or IPTV/streaming content passes through the router at lightning speed, even when there is heavy Internet traffic. The speed of different types of outgoing data passing through the router is also controlled to ensure that users do not saturate bandwidth with their browsing activities.

Robust Firewall Security

The NAT default firewall has advanced anti-hacker pattern-filtering protection features that automatically detect and block Denial of Service (DoS) attacks. In addition, Packet Filtering provides high-level security for access control. Built with Stateful Packet Inspection (SPI), the router enables users to determine whether or not a data packet is allowed to pass through the firewall to the private LAN.

Optimal Wireless Speed and Coverage

With an integrated 802.11n Wireless Access Point, the router delivers up to 6 times the speed and 3 times the wireless coverage of an 802.11b / g network device. It supports a link rate up to 300Mbps and is also compatible with 802.11b/g equipment. The Wireless Protected Access (WPA-PSK/WPA2-PSK) and Wireless Encryption Protocol (WEP) features enhance the level of transmission security and access control over Wireless LAN. The router also supports the Wi-Fi Protected Setup (WPS) standard for easy and secure establishment of a wireless home network. If the user's network requires wider coverage, the built-in Wireless Distribution System (WDS) repeater function expands the wireless network without needing any external wires or cables.

Dual-WAN Interfaces:

- Dual-WAN – VDSL2/ADSL2+ or Ethernet WAN for Broadband.
- Supports VDSL Profiles : 8a, 8b, 8c 8d, 12a, 12b, and 17a
- Supports Upstream/Downstream connections rates up to 100/100Mbps
- Auto-detecting VDSL2/ADSL2+
- Seamless ADSL2+ fallback

Management:

- TR-069 remote management
- Available Syslog monitoring

Wireless 802.11n:

- Draft 802.11n wireless and delivers up to 300Mbps link rate
- 802.11n Wireless AP with WPA-PSK/WPA2-PSK Supported
- Supports Wi-Fi WMM prioritization

Firewall:

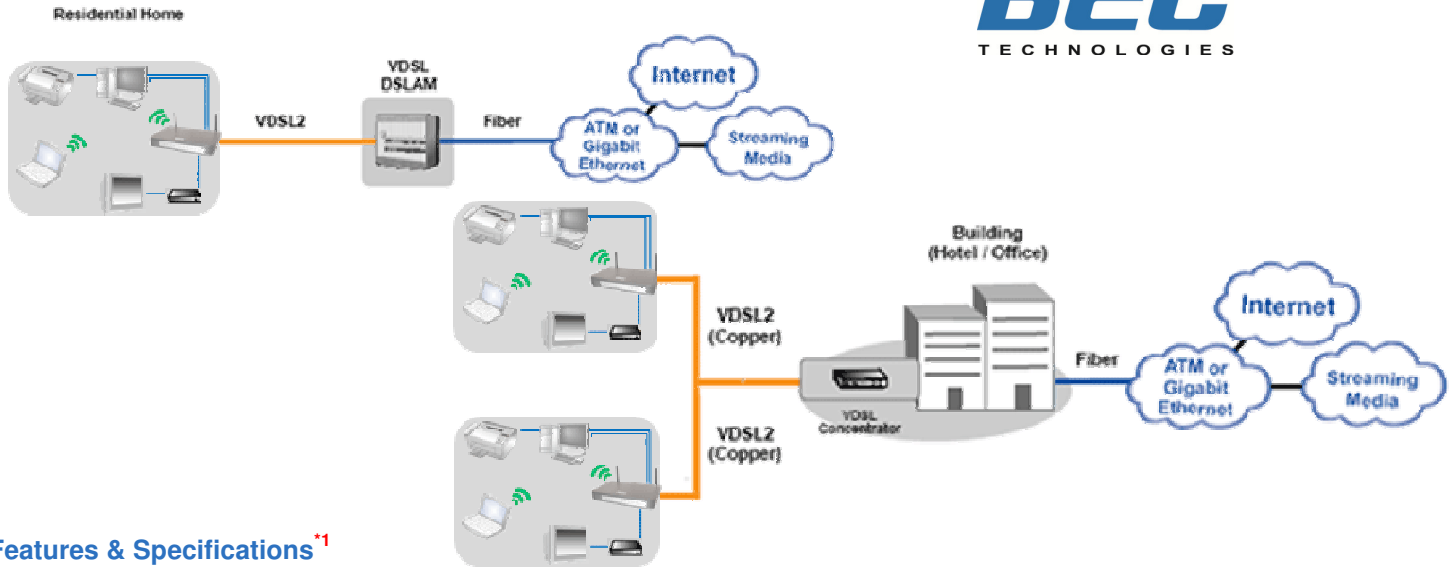
- SOHO Firewall Security with DoS Prevention and SPI

QoS:

- Quality of Service for traffic prioritization and bandwidth management
- Supports IPTV Applications^{*3}

Ideal for

- Home, SOHO and MTU/MDU environments



Features & Specifications^{*1}

VDSL Compliance

- Compliant with VDSL Standard
 - G.VDSL (ITU G.993.1)
- Compliant with VDSL2 Standard
 - G.VDSL2 (ITU G.993.2)
 - VDSL2 Profiles: (8abcd, 12ab, and 17a)
- Supports 997 and 998 Band Plans
- Supports extended US0 band
- Upstream/Downstream connections rates 100/100Mbps^{*2}
- SRA (Seamless Rate Adaption)
- Dual Latency
- Impulse Noise Protection (INP)

ADSL Compliance

- Compliant with ADSL Standard
 - Full-rate ANSI T1.413 Issue 2
 - G.dmt (ITU G.992.1)
 - G.lite (ITU G.992.2)
 - G.hs (ITU G.994.1)
- Compliant with ADSL2 Standard
 - G.dmt.bis (ITU G.992.3)
 - ADSL2 Annex L (ITU G.992.3 Annex L)
 - ADSL2 Annex M (ITU G.992.3 Annex M)
- Compliant with ADSL2+ Standard
 - G.dmt.bis plus (ITU G.992.5)
 - ADSL2+ Annex M (ITU G.992.5 Annex M)

Network Protocols and Features

- NAT, ARP, DHCP, static routing and RIP-1 / 2
- Universal Plug and Play (UPnP) compliant
- Dynamic Domain Name System (DDNS)
- Virtual Server and DMZ
- SNTP, DNS relay, proxy and IGMP snooping

Firewall

- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- DoS attack prevention including IP Spoofing, Land Attack, Smurf Attack, Ping of Death, TCP SYN Flooding, etc.
- Packet Filtering - port, source IP address, destination IP address, MAC address

Quality of Service Control

- Supports the DiffServ approach
- Traffic prioritization and bandwidth management based-on IP protocol, port number and address

ATM and PPP Protocols

- ATM Adaptation Layer Type 5 (AAL5)
- Multiple Protocol over AAL5 (RFC 2684, formerly RFC 1483)
- Bridged or routed Ethernet encapsulation
- VC and LLC based multiplexing
- PPP over Ethernet (PPPoE)
- PPP over ATM (RFC 2364)
- Classical IP over ATM (RFC 1577)
- MAC Encapsulated Routing (RFC 1483 MER)
- OAM F4 / F5

Wireless LAN

- Compliant with IEEE draft 802.11n draft, 802.11g and 802.11b standards
- Operating Frequency: 2.4 GHz - 2.484 GHz.
- Up to 300Mbps wireless operation rate
- Wi-Fi Protected Setup (WPS) for easy setup
- 64- / 128-bit WEP supported for encryption
- Wireless Security with 802.1X, WPA-PSK / WPA2-PSK, 802.1 And mixed support
- Wi-Fi Multi-Media (WMM)
- Multiple SSID support (up to 4)
- Enable/Disable SSID Broadcast
- Wireless Client Isolation
- MAC address filtering
- Wireless Distribution Systems (WDS)
- Wireless Security with WPA-PSK / WPA2-PSK support

IPTV Applications^{*3}

- IGMP proxy and snooping for video service
- Virtual LAN (VLAN)
- Quality of Service (QoS)

Management

- Web-based GUI for remote and local management
- Firmware upgrade and configuration backup/restore functionality
- Embedded Telnet server for remote and local management
- Supports DHCP server / client / relay
- TR-069 remote management support
- Configurable Syslog
- SNMP Agent
- User Management (admin, user and support)
- Access Control (HTTP, FTP and Telnet)
- LAN, WAN and xDSL statistic summary
- WAN and LAN connection Diagnostics
- Fault Management in VDSL2 PTM mode

Hardware Specifications

Physical Interface

- WLAN: 2 (2dbi) detachable antennas
- DSL: 1 VDSL/ADSL (RJ-11)
- EWAN: RJ-45 Ethernet 10/100/1000
- LAN: 4-port 10/100 (MDI/MDI-X) Switch
- USB 2.0
- Factory default reset button
- Power jack
- Power switch

Physical Specifications

- Dimensions: 9.04" x 6.10" x 1.69" (229.5 x 155 x 43mm)

Power Requirements

- Input: 12V DC, 1.5A

Operating Environment

- Operating temperature: 5 to 40 °C
- Storage temperature: -20 to 70 °C
- Humidity: 30 to 90% non-condensing

*Notes:

- Specifications on this datasheet are subject to change without prior notice.
- Transceiver delivers 100Mbps downstream and 50Mbps upstream (100Mbps upstream with External AFE).
- IPTV application may require subscription to IPTV services from a Telco / ISP. .