



BEC 8200M

Very High-speed Connectivity for Internet Access and IPTV Service



Performance:

- VDSL2 Profiles: 8a, 8b, 8c, 8d, 12a, 12b, 17a and 30a
- Upstream/Downstream connections rates 100/100Mbps

Interoperability:

- Interoperable with all major DSLAMs
- Enhanced ADSL DMT Engine
- Improved INP (impulse noise protection) better range, superior performance, less transmission errors

Network Protocols and Features

- Transparent bridging
- Ethernet over VDSL (EoVDSL) Bridging
- IEEE 802.3/3u compliant
- Hardware IGMP Snooping for IGMP v1/v2

Management:

- Simple management function via console port
- Firmware upgradable (on demand)

Ideal for:

- Home, SOHO environments
- Self-Installation Service Offerings

The BEC 8200M is a single VDSL2 port modem equipped with four Ethernet ports by embedded 10/100Mbps Ethernet Switch. Compliant with ITU-T G.993.2 VDSL2 standard, the BEC 8200M supports the highest rate of up to 100Mbps/100Mbps in VDSL2 Profile (30a) with a 6-band solution. Since VDSL2 has the characteristic of faster rates over shorter distances, the ideal architecture for Telcoms is to use fiber optic lines as the backbone and a VDSL2 line as the last mile into the home or office. VDSL2 operates over copper wires so that telecom operators can provide bundled services to end-users similar to those that cable operators offer. With outstanding throughput, the BEC 8200M can complement a fiber network to offer the best solution for delivering IPTV or home entertainment services. The BEC 8200M also supports both central office (CO) and customer-premises equipment (CPE) modes for back-to-back applications. Besides forwarding Ethernet packets between VDSL2 port and Ethernet ports, BEC 8200M also provides Hardware IGMP snooping for IGMP v1/v2 to facilitate IPTV services without interfering with other applications.

Standard-compliant to ITU-T G.993.2

The BEC 8200M complies with the international standards and interoperates with other major/open chipsets. It supports different profiles (8a, 8b, 8c, 8d, 12a, 12b, 17a, and 30a); different band plans (997, 998, and proprietary) and different annex types (Annex A, Annex B and Annex C), by factory settings to fit into different requirements. Benefit from the latest chip design technology, BEC 8200M consumes less power (less than 2 watt per VDSL2 port) and has shorter training time to make device up and running.

Long Reach Ethernet (LRE): Back-to-back Applications

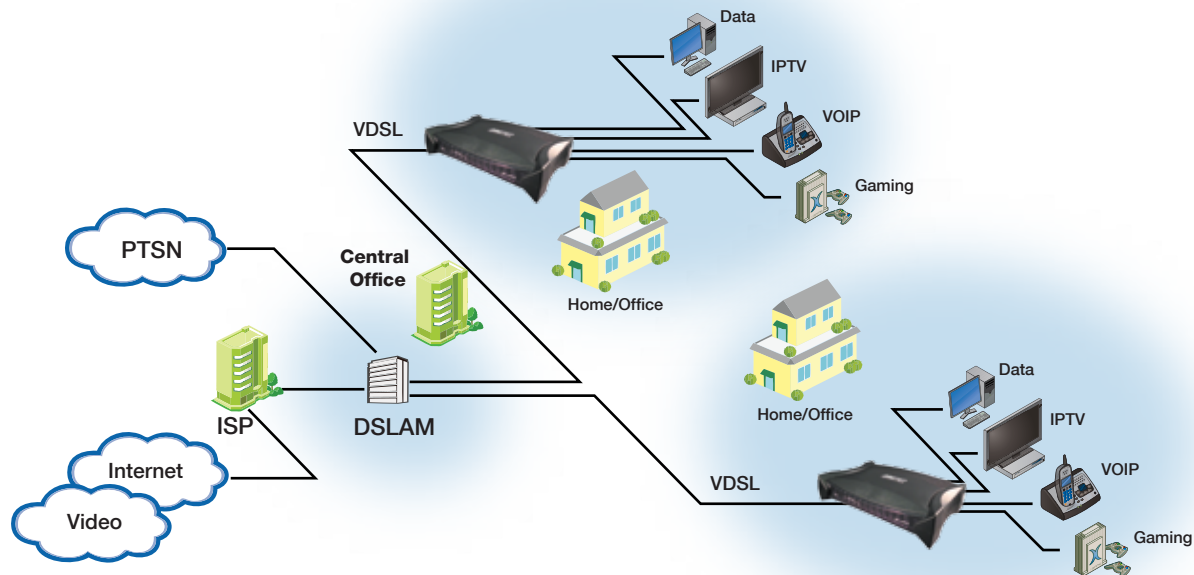
In addition to using one BEC 8200M to connect to ISP/Telco's DSLAM for accessing Internet or video services, users can utilize a pair of BEC 8200M for back-to-back applications. Theoretically the maximum length for Ethernet cable is within 100 meters. With two 8200M modems, users can have 100/100Mbps connectivity over a twisted-pair phone lineup to 200 meters or longer. This capability can help users to bridge two distinct LAN segments in longer distance or to have surveillance service a little farther over existing twisted-pair phone cables.

Easy Installation

The BEC 8200M is easy to use. Simply connect the hardware interfaces without the need for complicated configuration efforts, the device will synchronizes with VDSL2 DSLAM (VTU-O) in auto-negotiated mode and allow users to access the Internet or watch IPTV instantly.



Application Diagram



Features & Specifications

VDSL2 Compliance

- Compliant with VDSL2 Standard, ITU-T G.993.2
- VDSL2 Profiles: 8a, 8b, 8c, 8d, 12a, 12b, 17a and 30a
- Supports 997 and 998 Band Plans
- Supports Annex A, Annex B and/ or Annex C
- Upstream/Downstream connection rates 100/100Mbps
- OLR (On Line Reconfiguration), US0 Supported
- Supports Ethernet 802.3ah

Network Protocols and Features

- Transparent bridging
- Ethernet over VDSL (EoVDSL) Bridging
- IEEE 802.3/3u compliant
- Hardware IGMP Snooping for IGMP v1/v2

Management

- Simple management function via console port
- Firmware upgradable (on demand)

Hardware Specifications

Physical Interface

- VDSL: one RJ-11 connector
- DIP Switch: DIP4 for configuring RT/COT mode
- Ethernet: 4-port 10/100Mbps auto-crossover (MDI / MDI-X) Switch
- Console: PS2, for management function
- Power jack
- Power switch

Physical Specifications

- Dimensions: 7.09" x 4.72" x 1.57" (180mm x 120mm x 40mm)

Power Requirements

- Input: 12V DC, 1A

Operating Environment

- Operating temperature: 0 - 40 °C
- Storage temperature: -20 - 70 °C
- Humidity: 20 - 95% non-condensing