

# CBV380 / CBV380E Series

## PacketCable 1.5 and DOCSIS/EURODOCSIS 3.0 Compliant Embedded MTA

### Introduction

#### Product Description:

The **CBV380 / CBV380E** is the first worldwide leading product especially designed for DOCSIS3.0 / EURODOCSIS3.0 compliant embedded MTA.

Leverage from edge technology DOCSIS3.0 / EURODOCSIS3.0, **CBV380 / CBV380E** can adopt dynamic bandwidth adjustment by providing various set of downstream and upstream combination up to cable plant requirement, such as 4 D/S with 4 U/S or 8 D/S with 4 U/S...etc. Not only **CBV380 / CBV380E** can provide ultran data bandwidth via the RF input, meanwhile, it also provides Voice over IP and Gigabit Ethernet Residential Gateway functionality integrated with Cable Modem which allows you implement your VoIP phone call directly through Cable Modem Broadband Network service with its built-in PacketCable1.5 and DOCSIS/EURODOCSIS 3.0 compliant specification.

Equipped with two standard phone ports, **CBV380 / CBV380E** series could easily provides end-users low-cost, long-distance calling, faxing, and a host of advanced services .And with the integration of Gigabit Ethernet port, the **CBV380 / CBV380E** series could also be used as a 10/100/1000bps wire-speed Cable Modem Residential Gateway in your home or small office. The ability to route data information into your broadband network could help you easily extend your local network and carries more applications

The **CBV380 / CBV380E** is MGCP/SIP compliant product and has been tested with most major VoIP Softswitch vendors' Call Management systems. And it also has voice quality support that includes hardware based Quality of Service (QoS), voice compression (popular voice CODECs G.711, G.729A, G.723.1, and so on), echo cancellation, dynamic latency (jitter) buffers, silence suppression, and comfort noise generation.



#### Feature

- PacketCable 1.5 Standard Compliant
- DOCSIS/EURODOCSIS 3.0 Standard Compliant
- Support PacketCable MGCP (Media Gateway Control Protocol)
- SIP (Session Initiation Protocol) Compliant.
- 1 x Standard RJ-45 Connector for 10/100/1000 BaseT Ethernet with Auto-Negotiation MDIX Functions
- USB 2.0 Device
- Two Ports of RJ-11 Foreign Exchange Station (FXS) for IP Telephony
- QoS Enhancement
- MSO SNMPv3 Remote Network Management
- Provide MIBs DOCSIS1.0/1.1/2.0/3.0
- Support Simultaneous Voice and Data Communications
- Echo Cancellation
- Voice Active Detection (VAD)
- Comfort Noise Generation (CNG)
- Web Browser Management Auto Detect Network Status

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### Specifications

#### Physical Interface

- **To WAN** F-type female 75 ohm connector (option)
- **To Telephone** RJ-11 Telephone Socket x 2
- **To LAN** GbE Ethernet 10/100/1000 Mbps x 1  
USB 2.0 Device Specification
- **To Power** 12V DC /1.5A

#### Standard Support

- **DOCSIS/EURODOCSIS 1.0/1.1/2.0/3.0**
- **PacketCable 1.0/1.1/1.5**

#### Downstream /Receiver/

- **Demodulation** 8 Downstream with up to 1024QAM
- **Data Rate** 30Mbps (64QAM), 43Mbps (256QAM)/DOCSIS  
41Mbps (64QAM), 55Mbps (256QAM)/EURODOCSIS  
Up to 320Mbps by 8 Channels bonding
- **Frequency Range** 88MHz to 860MHz DOCSIS  
108MHz to 862MHz EURODOCSIS
- **Bandwidth** 6MHz DOCSIS  
8MHz EURODOCSIS
- **Input Power** -15dBmV to +15dBmV

#### Upstream /Transmitter/

- **Modulation** QPSK, 8/16/32/64/128,256QAM, 4 U/S
- **Data Rate** 30Mbps / TDMA , 35Mbps / SCDMA  
Up to 160Mbps by 4 U/S channel Bonding
- **Frequency Range** 5MHz~42MHz / DOCSIS  
5MHz~55MHz / Japan  
5MHz~65MHz / EURODOCSIS
- **Bandwidth** 200KHz, 400KHz, 800KHz,  
1600KHz, 3200KHz, 6400KHz
- **Output Signal Level**  
+8 to +58dBmV (QPSK), +8 to +54dBmV (64QAM),  
+8 to +54dBmV (32QAM) , +8 to +53dBmV (S-CDMA)

#### Voice / Fax

- **Audio Codes** G.711, G.729A, G.723.1.
- **VAD** Voice Activity Detection
- **CNG** Comfort Noise Generation
- **Echo cancellation** G.165/G.168 up to 16ms
- **Packet Tone** DTMF generation/Call Progress  
Generation/Custom Tone Generation
- **Call discrimination** Fax and Modem Detection

#### Network Protocol

- **Network protocol** IP / TCP / UDP / ARP / ICMP / DHCP / TP /  
TFTP / SNMP / HTTP
- **Routing** DNS relay / DHCP server / RIP I&II
- **Internet Sharing** NAT / NAPT / DHCP server / DNS relay
- **Application protocol** SNMP v1/v2/v3
- **DHCP server** LAN DHCP service with and without  
WAN connection
- **DHCP client** Automatically gets IP and DNS server  
address from DHCP server at ISP
- **DNS Server** Resolve local host name & return referral upon  
non-resolution
- **ToD (RF868)** ToD support for local and MSO time  
synchronization
- **TFTP Client** TFTP support for cable modem configuration  
file download
- **Tools** Ping tool via ICMP  
Speed test tool via UDP
- **Management** Web-based Management Interface utility