

# CPVA642EVA

Telsey CPVA642EVA is a unique in the market Home Gateway that, beyond powerful ADSL2+ routing capabilities and VoIP telephone adapter functionalities, bundles an Enhanced Wi-Fi Video Access Point providing an innovative Wi-Fi 802.11 a/b/g/n MIMO solution with internal antennas that beats the barrier of home cabling for multiple High Definition IP TV streaming inside the houses.

Joined with Telsey STA-EVA, the Ethernet Enhanced Wi-Fi Video Adapter to be connected to Set Top Boxes, Telsey CPVA642EVA is the ADSL2+ Home Gateway fitting the needs of operators who provide bundled broadband services to residential and business customers enabling multiple High Definition video and broadband data streaming through Wi-Fi inside houses or offices.

## KEY FEATURES

- >> Integrated ADSL2+ modem router
- >> 4 Ethernet RJ-45 ports
  - 1 USB master port
  - 1 USB slave port
- >> 2 simultaneous VoIP calls (voice, fax) through POTS RJ-11 FXS interfaces
- >> Full choice of VoIP signalling protocols and codecs
- >> IEEE 802.11 a/b/g/n access point. 802.11n Draft 2.0 compliant. 2TX streams + 3RX antenna array
- >> Internal multiple antennas.
- >> Dual band operation (2.4 GHz and 5GHz)
- >> High performances, optimised for low BER
- >> Excellent wireless, ATM and IP QoS management
- >> Easy installation and link quality survey

## BENEFITS

- >> All in one solution ADSL2+, VoIP, data and Enhanced Wi-Fi Video Access Point
- >> The superior layer 3 routing features allow service providers to efficiently deliver through existing telephone lines innovative multimedia services such as IP TV, VoIP, fast Internet surfing, gaming on demand and e-learning within the domestic environment.
- >> Preserve user's telephone equipment without the need to add external external VoIP adapter. End users benefit from Class 5 supplementary services, fax and modem services over IP network
- >> Maximum flexibility for quick integration with operators' network infrastructure
- >> High performance WiFi link up to 300 Mbps PHY rates allow HD IPTV multiple streaming inside the house, beating the barrier of ethernet cables.
- >> Internal antennas make the device compact and more appealing, preserving at the same time performances.
- >> More RF channels available to automatically find the best frequencies to use and avoid interferences.
- >> Provides assured 50-100 Mbps with <0.1% BER in a typical 150 m2 flat.
- >> Automatic configuration protocol for easy pairing of devices, Vu meter LEDs to help optimal positioning.
- >> Connecting Consumer Electronic and Wi-Fi devices is easy and quick, allowing multisharing contents inside the house.



\*The 'Wi-Fi CERTIFIED' logo is a certification mark of the Wi-Fi Alliance  
The Wi-Fi Protected Setup Mark is a mark of the Wi-Fi Alliance

## CPVA642EVA

## TECHNICAL HIGHLIGHTS

## BROADBAND INTERFACE

ADSL/ADSL2/ADSL2+	<ul style="list-style-type: none"> <li>&gt;&gt; ANSI T1.413 I2</li> <li>&gt;&gt; ITU Automode</li> <li>&gt;&gt; G.992.2 G.Lite</li> <li>&gt;&gt; G.992.1 Annex A/Annex B - G.dmt</li> <li>&gt;&gt; G.992.3 (ADSL2)</li> <li>&gt;&gt; G.992.5 (ADSL2+) Annex M and Annex L</li> <li>&gt;&gt; UBR, CBR, rtVBR, nrtVBR</li> <li>&gt;&gt; OAM (F4/F5) supported</li> <li>&gt;&gt; Up to 16 PVC</li> </ul>	<ul style="list-style-type: none"> <li>&gt;&gt; LLC/SNAP for bridged/routed PDU's (RFC 2684, RFC 1483)</li> <li>&gt;&gt; PPPoE (RFC 2516); PPPoA (RFC 2364)</li> <li>&gt;&gt; User authentication PAP (RFC 1334) and CHAP (RFC 1994)</li> <li>&gt;&gt; IPoA</li> <li>&gt;&gt; Bridge</li> <li>&gt;&gt; MER (VCMUX, LLC/SNAP-Bridging)</li> </ul>
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## WI-FI INTERFACE

WiFi standards	<ul style="list-style-type: none"> <li>&gt;&gt; 802.11n draft 2.0</li> <li>&gt;&gt; 802.11b, 802.11g</li> </ul>	<ul style="list-style-type: none"> <li>&gt;&gt; 802.11a, 802.11h</li> <li>&gt;&gt; 802.11e, 802.11d, 802.11i, 802.11j</li> </ul>
Frequencies	<ul style="list-style-type: none"> <li>&gt;&gt; 2.4-2.5 GHz</li> <li>&gt;&gt; 5.15-5.85 GHz</li> </ul>	<ul style="list-style-type: none"> <li>&gt;&gt; Automatic Channel selection algorithm</li> </ul>
Operating modes	<ul style="list-style-type: none"> <li>&gt;&gt; 802.11bgn @ 2.4 GHz (compatible with existing 802.11bg WiFi devices)</li> <li>&gt;&gt; 802.11ahn @ 5 GHz (compatible with existing 802.11ah WiFi devices)</li> <li>&gt;&gt; 802.11n @ 2.4 GHz (high performance mode)</li> <li>&gt;&gt; 802.11n @ 5 GHz (high performance, low interference mode)</li> </ul>	
PHY features	<ul style="list-style-type: none"> <li>&gt;&gt; 802.11b: 1,2,5,5,11 Mbps</li> <li>&gt;&gt; 802.11a/g: 6,9,12,24,36,48,54 Mbps</li> <li>&gt;&gt; 802.11n (20MHz): MCS0-15, 32 with Short Guard Interval Support (up to 144Mbps)</li> <li>&gt;&gt; 802.11n (40MHz): MCS0-15, 32 with Short Guard Interval Support (up to 300Mbps)</li> </ul>	<ul style="list-style-type: none"> <li>&gt;&gt; 2T3R mode (2TX streams, 3RX MRC-OFDM rank receiver)</li> <li>&gt;&gt; Space Time Block Code (STBC)</li> <li>&gt;&gt; MSDU/PSDU aggregation</li> <li>&gt;&gt; Link adaptation</li> <li>&gt;&gt; Bluetooth Co-existence</li> </ul>
Antennas	<ul style="list-style-type: none"> <li>&gt;&gt; Three internal high performance dual band antennas</li> <li>&gt;&gt; 2T3R mode with spatial diversity</li> </ul>	
QoS	<ul style="list-style-type: none"> <li>&gt;&gt; 802.11e (WMM, WMM-PS)</li> <li>&gt;&gt; 4 priority queues (voice, video, data, background)</li> </ul>	
Security	<ul style="list-style-type: none"> <li>802.11i</li> <li>&gt;&gt; WEP64 / WEP128</li> <li>&gt;&gt; WPA / WPA2</li> </ul>	<ul style="list-style-type: none"> <li>&gt;&gt; MAC filtering</li> <li>&gt;&gt; WPS supported with registration button</li> </ul>

## DATA

Domestic LAN Interfaces	<ul style="list-style-type: none"> <li>&gt;&gt; 4 Ethernet 10/100 BaseT half/full duplex autonegotiating, RJ-45 connectors</li> <li>&gt;&gt; 1 USB 1.1 slave port type B receptacle</li> <li>&gt;&gt; 1 USB 2.0 master port type A receptacle</li> </ul>	
Layer 3	<ul style="list-style-type: none"> <li>&gt;&gt; NAT/PAT (RFC 1631)</li> <li>&gt;&gt; Parental Control</li> </ul>	<ul style="list-style-type: none"> <li>&gt;&gt; Static Routing</li> <li>&gt;&gt; RIPv2</li> </ul>
Firewalling	<ul style="list-style-type: none"> <li>&gt;&gt; Access Control List</li> <li>&gt;&gt; Packet filtering</li> <li>&gt;&gt; Application content filtering</li> <li>&gt;&gt; Stateful inspection</li> <li>&gt;&gt; DMZ support</li> <li>&gt;&gt; Defence against Denial of Service attacks</li> </ul>	
IP VPN	<ul style="list-style-type: none"> <li>&gt;&gt; Encryption algorithm: DES, 3DES</li> <li>&gt;&gt; Authentication algorithm: MD5, SHA-1</li> <li>&gt;&gt; Encapsulation Security Payload (ESP)</li> <li>&gt;&gt; Authentication Header (AH)</li> <li>&gt;&gt; Key Management: IKE, Manual, Pre-shared Keys</li> </ul>	
QoS	<ul style="list-style-type: none"> <li>&gt;&gt; ATAM and IP QoS supported.</li> </ul>	
Other	<ul style="list-style-type: none"> <li>&gt;&gt; DHCP server</li> <li>&gt;&gt; TFTP client</li> <li>&gt;&gt; Syslog client</li> </ul>	

## VIDEO SUPPORT

- >> IGMP v3 proxy
- >> multicast to unicast conversion

## DISCLAIMER:

All statements, technical information and recommendations contained in this documentation have been carefully checked for reliability; however no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.

## CPVA642EVA

## TECHNICAL HIGHLIGHTS

## VOICE

	<ul style="list-style-type: none"> <li>&gt;&gt; 2 FXS RJ-11 ports</li> <li>&gt;&gt; Up to 2 simultaneous VoIP calls</li> </ul>	
FXS Interfaces	<ul style="list-style-type: none"> <li>&gt;&gt; Dial mode supported: DTMF</li> <li>&gt;&gt; Tones: customizable.</li> <li>&gt;&gt; Ringing voltage: 35 Vrms, Sine wave</li> <li>&gt;&gt; Ringing frequency: 25 Hz default (frequency and cadence programmable for each FXS interface)</li> <li>&gt;&gt; REN : 5 per FXS port</li> <li>&gt;&gt; On-Hook voltage: 48 V nominal</li> <li>&gt;&gt; Off-hook current: 22 mA (other values programmable)</li> <li>&gt;&gt; Terminating impedance: 600 Ohm default (other impedances programmable)</li> <li>&gt;&gt; Loop Signaling: Loop Start</li> </ul>	
VoIP Protocols	<ul style="list-style-type: none"> <li>&gt;&gt; H.323 v.4, SIP RFC3261, MGCP</li> </ul>	
Properties	<ul style="list-style-type: none"> <li>&gt;&gt; Echo cancellation G.168</li> <li>&gt;&gt; Silence suppression/comfort noise generation</li> <li>&gt;&gt; Modem/fax passthrough</li> </ul>	
Voice Codecs	<ul style="list-style-type: none"> <li>&gt;&gt; G.711, G.729A</li> </ul>	
Fax over IP Protocols	<ul style="list-style-type: none"> <li>&gt;&gt; T.38</li> </ul>	
Class 5 service	<ul style="list-style-type: none"> <li>&gt;&gt; Generic Signaling</li> <li>&gt;&gt; Call Transfer</li> <li>&gt;&gt; Call Hold</li> </ul>	<ul style="list-style-type: none"> <li>&gt;&gt; Call Waiting</li> <li>&gt;&gt; Message Waiting</li> <li>&gt;&gt; Call Transfer</li> </ul>
Caller I.D.	<ul style="list-style-type: none"> <li>&gt;&gt; Through FSK and DTMF</li> </ul>	

## MANAGEMENT

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|--|--|
| <ul style="list-style-type: none"> <li>&gt; TR-069</li> <li>&gt; Remote Telnet console</li> <li>&gt; SNMP</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Integrated Web Server</li> <li>&gt; Upgradeable via TFTP</li> <li>&gt; Reset Button</li> </ul> |
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## POWER SUPPLY

- > 12 VDC, with external power adapter 230 Vac, 50 H
- > Switch on-off button

## PHYSICAL DIMENSIONS

- > Width 190mm Depth 140mm Height 34mm Weight 500gr.
- > Wall mountable

## ENVIRONMENTAL CONDITIONS

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|--|--|
| <ul style="list-style-type: none"> <li>&gt; Operation temperature -5 - 45° C</li> <li>&gt; Storage temperature -5 - 55° C</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Humidity 85% (non condensing)</li> </ul> |
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