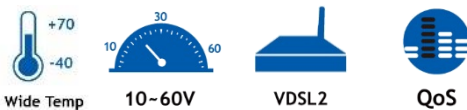


## Industrial Ethernet over VDSL2 Extender

# JetCon2502 V2 Ethernet over VDSL2 Extender



- IEEE 802.3u 100Base-TX Fast Ethernet Extender
- IEEE 802.3x flow control & Back-pressure
- ITU-T G.993.5 VDSL2 standard
- 8 different SNR Data Rate profiles
- RJ-11 connectors for VDSL
- RJ-45 10/100Mbps Fast Ethernet Port
- Extend Ethernet to 2.5KM far
- Transport 1792 bytes packet
- Broadcast Packet filtering
- Power input by DC jack & terminal block
- 10-60V Wide Voltage Input
- IP-40 Protection
- -40~70C Hazardous environment application



## Overview

JetCon 2502 V2 is an Ethernet to VDSL2 (Very High-Rate Digital Subscribe Loop -2) extender and is compliance with ITU-T G.993.5 standard. It allows the VDSL2 carriers to deliver Ethernet data up to 100Mbps in both upstream and downstream over existing twisted copper. The JetCon 2502 converter featured Discrete Multi-Tone modulator/ de-modulator and VDSL Analog Front End (AFE) technology; it is an ideal solution to carry Ethernet Data stream to 2500 meters far away to extend local LAN on the same line.

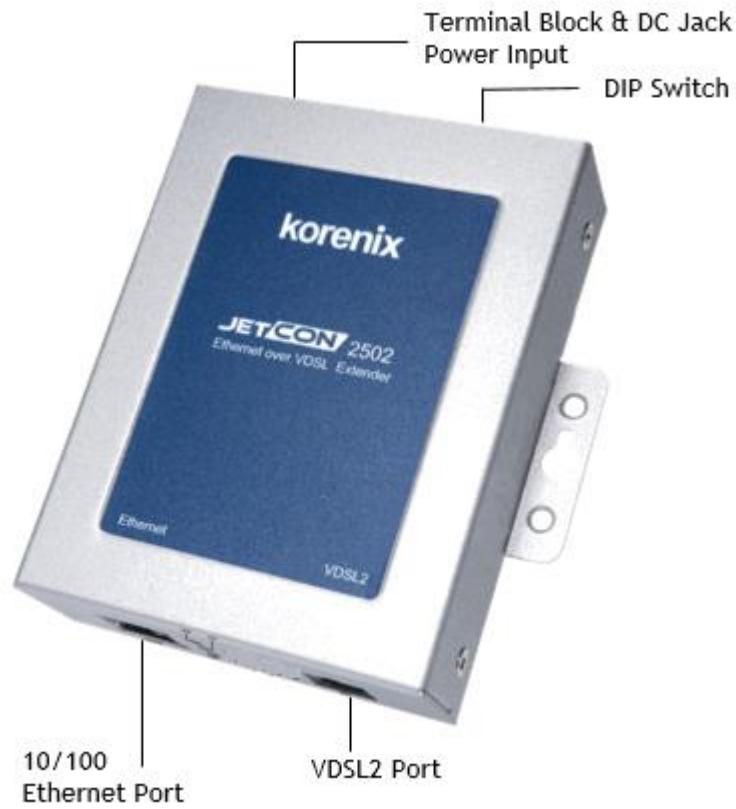
To deploy VDSL2 access with the telephone network, the VDSL2 converter should follow the line impedance of telephone network. Therefore, each region will adopt different line splitter to provide best communication quality. As the resulting, users need additional wiring and splitter, but mostly make a jumble at home or office. The JetCon 2502 V2 has implement splitter for each region that saving your installation time and make it more simply.

For the network infrastructural, this product is the best choice for planning centralized internet access through the existing wiring system for hotels, dormitories or where need extend LAN over 100m over a single pair of copper path.

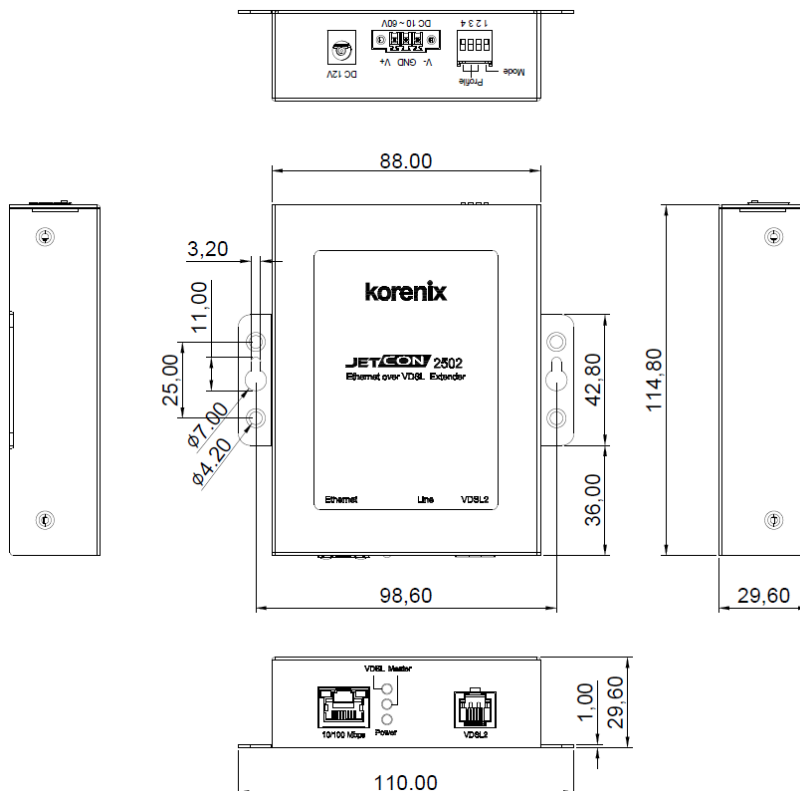
The converter allow users to compete with wireless and satellite providers by offering outstanding service, such as HDTV or Video chatting over a existing telephone copper cable without any configuration, just plug and play to enlarge infrastructure for your applications.



## Appearance



## Dimension



# Specification

Technology																																																																				
Standard	IEEE 802.3 10 Base-T IEEE 802.3u 100 Base-TX IEEE 802.1p Class of Service IEEE 802.1Q Quality of Service ITU-T G.993.2 VDSL2																																																																			
Performance																																																																				
Forwarding Technology	Store and Forward technology with 64 ~1792 bytes packet forwarding ability.																																																																			
Switch Packet buffer	384Kbits																																																																			
MAC Table	2K with 300 sec aging time																																																																			
Class of Service	4 Packet forwarding queues with 1(Lowest):4 (Low):8 (High):15 (Highest) WRR (weighted round robin) forwarding schematics																																																																			
Quality of Service	VLAN tag priority, IPv4 packet precedence and IPv6 ToS.																																																																			
Broadcast filtering	Fast Ethernet: 200 packet / per sec. @100Mbps; 20 packet / per sec. @ 10Mbps																																																																			
Interface																																																																				
Number of Ports	1 x 10/100TX RJ-45 ports with Auto MDI/MDI-X, Auto Negotiation. 1 X VDSL2																																																																			
Connectors	10/100 Base-TX: RJ-45 VDSL 2: RJ-11																																																																			
Cables	<ul style="list-style-type: none"> <li>- RJ-45 Fast Ethernet port: Cat.5e 2 pairs UTP/STP cable, up to 100 meters.</li> <li>- VDSL2: 1 pairs of UTP cable, up to 2500 meters.</li> </ul>																																																																			
Diagnostic LEDs	<ul style="list-style-type: none"> <li>- System Power: Power on (Green On)</li> <li>- Fast Ethernet port: Speed (100Mbps: Yellow On)</li> <li>- Link Activity (Green) (On: 10 or 100Mbps Link up, Blinking: packet is on transmitting)</li> <li>- Master (Green on): Device operating under Master Mode.</li> <li>- VDSL Link/Negotiation (Green): On/ Link, Blinking/Negotiation</li> </ul>																																																																			
DIP Switch	<table border="1"> <thead> <tr> <th rowspan="2">CO/CPE</th> <th colspan="4">DIP</th> <th rowspan="2">Rate Limit (Mbps)</th> <th rowspan="2">Target Margin (dB) (DS/US)</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td rowspan="8">Master</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>160 / 160</td> <td>8/8</td> </tr> <tr> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>ON</td> <td>220 / 110</td> <td>8/8</td> </tr> <tr> <td>OFF</td> <td>OFF</td> <td>ON</td> <td>OFF</td> <td>160 / 160</td> <td>6/6</td> </tr> <tr> <td>OFF</td> <td>OFF</td> <td>ON</td> <td>ON</td> <td>220 / 110</td> <td>6/6</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>OFF</td> <td>OFF</td> <td>150 / 150</td> <td>12/12</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>OFF</td> <td>ON</td> <td>200 / 100</td> <td>12/12</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>ON</td> <td>OFF</td> <td>20 / 20</td> <td>24/24</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>ON</td> <td>ON</td> <td>150 / 50</td> <td>6/6</td> </tr> <tr> <td>Slave</td> <td>ON</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p>* The cable length should under 800 meters to make 24/24 dB effective.</p>	CO/CPE	DIP				Rate Limit (Mbps)	Target Margin (dB) (DS/US)	1	2	3	4	Master	OFF	OFF	OFF	OFF	160 / 160	8/8	OFF	OFF	OFF	ON	220 / 110	8/8	OFF	OFF	ON	OFF	160 / 160	6/6	OFF	OFF	ON	ON	220 / 110	6/6	OFF	ON	OFF	OFF	150 / 150	12/12	OFF	ON	OFF	ON	200 / 100	12/12	OFF	ON	ON	OFF	20 / 20	24/24	OFF	ON	ON	ON	150 / 50	6/6	Slave	ON	-	-	-	-	-
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Power Connector	<ul style="list-style-type: none"> <li>- DC Jack: 12-60V (12V), 3-Pin, Ø 2mm Center Pin</li> <li>- Removable Terminal Block: 10-60V power Input</li> </ul> Power input with polarity reverse protection.																																																																			

Power Requirement	
Power	DC Jack: 12-60V (12V), 3-Pin, Ø 2mm Center Pin Removable Terminal Block: 10-60V power Input Power input with polarity reverse protection.
Power Consumption	4 Watts / DC 24V
Mechanical	
Enclosure Protection	Ingress Protection code - 40
Case	Aluminum metal case
Mounting	DIN Rail/Wall Mount installation
Dimension	29(H) x88(W)x 114(H) mm (Without Din-rail kit)
Weight	0.535kg with package 0.185kg without package
Environmental	
Operating Temperature	-40°C-70°C
Operating Humidity	0% - 95% non-condensing
Storage Temperature	-40°C-85°C
Storage Humidity	0%- 95% non-condensing
Approvals	
EMI	CE/EN 55032 class A, FCC Class A, EN 61000-3-2 :2014, EN 61000-3-3, EN 61000-6-4
EMS	CE/ EN 55024, EN 61000-6-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Safety	Hi-pot Testing - AC 1.5KV
Shock	IEC60068-2-27 (Compliance)
Vibration	IEC60068-2-6 (Compliance)
Free Fall	IEC60068-2-32 (Compliance)
Warranty	5 years
Ordering Information	
JetCon 2502	Industrial Ethernet over VDSL2 Extender
Includes	<ul style="list-style-type: none"> <li>- Product Unit JetCon2502-Industrial Ethernet over VDSL2 Extender</li> <li>- DIN rail kit</li> <li>- Quick Installation Guide</li> <li>- Adapter (Optional)</li> </ul>