



# IMC-V111ET-TB

**Industrial extended media converter with 1x10/100Base-T(X)  
to 1xVDSL2, Terminal block socket**

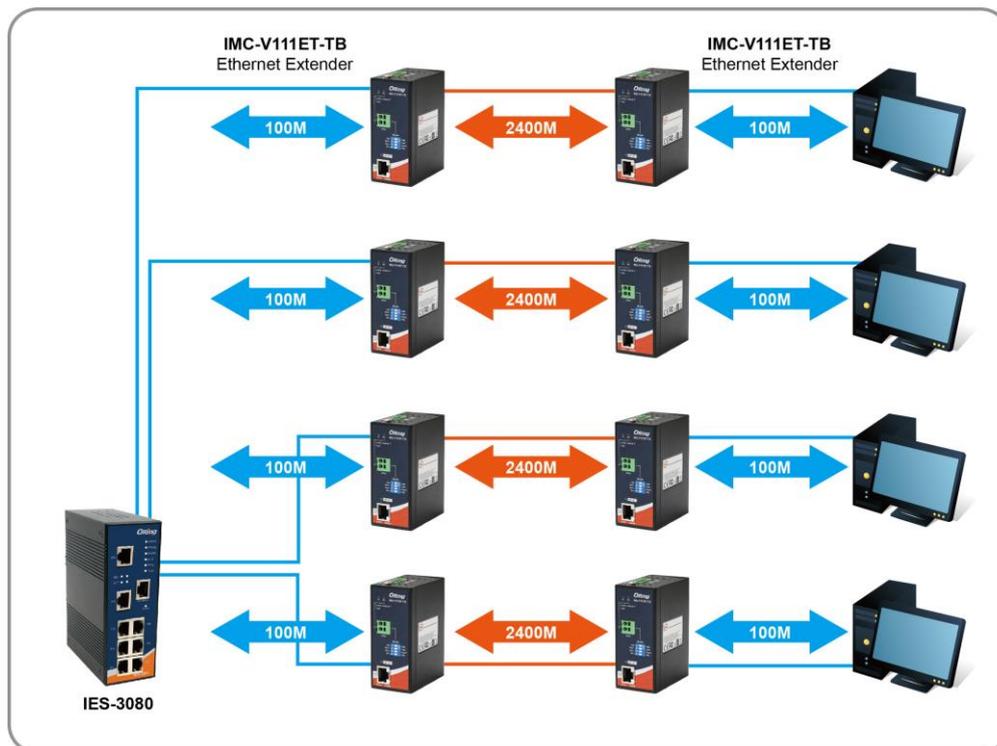
## Features

- Extend Ethernet distance up to 2,400m over 26AWG cable
- Cost-effective CO/CPE selectable via DIP switch
- Supports 2-wired transmission
- Redundant, reverse polarity protection 12~48VDC power inputs with Terminal Block
- Selectable Asymmetric and Symmetric mode for transmission of upstream and downstream signals
- Selectable SNR margin
- Ethernet port support Auto MDI/MDI-X switching function
- Ethernet port support full/half duplex operation
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled



## Introduction

IMC-V111ET-TB is a cost-effective solution for extending an Ethernet connection beyond its inherent distance limitation. IMC-V111ET-TB can extend the distance to 2,400 meters using a 26AWG cable. It has a switching architecture with 1 RJ-45 100Mbps Ethernet port and one asymmetric or symmetric Ethernet over VDSL2 port which is a terminal block connector supports 2-wired transmission. IMC-V111ET-TB provides a wide operating temperature range from -40~75°C, making it suitable for harsh operating environments.



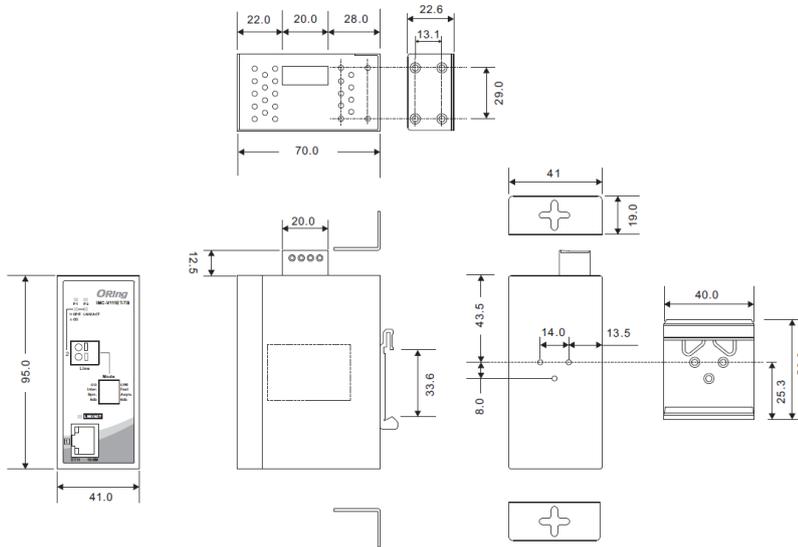
Connections of Media Converter

## Specifications

ORing Extended Converter Model	IMC-V111ET-TB		
<b>Physical Ports</b>			
100Base-TX Port in RJ45 Auto MDI/MDIX	1		
100Mbps Ethernet Extender Ports in Terminal Block	1 (support 2-wired)		
<b>Technology</b>			
Ethernet Standards	IEEE 802.3u for 100Base-TX, VDSL ITU-T G.993.1, VDSL2 ITU-T G.993.2		
Processing	Store-and-Forward		
<b>Performance</b>			
VDSL speed	Refer to Appendix A.		
<b>LED Indicators</b>			
Power Indicator	Green : Power LED x 2		
CO/CPE mode Indicator	Amber LED for CPE mode.		
100Base-T(X) RJ45 Port Indicator	Green LED for Link/ACK indicator.		
Ethernet Extender Indicator	Green LED for Link/ACK indicator.		
<b>DIP-Switch</b>			
DIP-Switch Setting	DIP-switch 1 for CPE/CO (Slave/Master) mode select :	(ON) CPE mode	(Off) CO mode
	DIP-switch 2 for fast/interleaved mode select :	(ON) Fast mode	(Off) Inter. mode
	DIP-switch 3 for Asymmetric/Symmetric mode select :	(ON) Asym. mode	(Off) Sym. mode
	DIP-switch 4 for SNR mode select :	(ON) 6db mode	(Off) 9db mode
<b>Power</b>			
Input power	Dual 12 ~ 48VDC power inputs.		
Power consumption (Typ.)	4.75 Watts		
Overload current protection	Present		
<b>Physical Characteristic</b>			
Enclosure	IP-30		
Dimension (W x D x H)	41 (W) x 70 (D) x 95.5 (H)mm (1.61 x 2.76 x 3.76 inch)		
Weight (g)	272g		
<b>Environmental</b>			
Storage Temperature	-40 to 85°C (-40 to 185°F)		
Operating Temperature	-40 to 75°C (-40 to 167°F)		
Operating Humidity	5% to 95% Non-condensing		
<b>Regulatory Approvals</b>			
EMI	FCC Part 15, CISPR (EN55022) class A		
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11		
Shock	IEC60068-2-27		
Free Fall	IEC60068-2-32		
Vibration	IEC60068-2-6		
<b>Warranty</b>	5 years		

## Dimension

Unit=mm



## Ordering Information

**IMC-V1** **A** **B** **ET-CC**

Code Definition	100Base-T(X) Port Number	100Mbps Ethernet Extender Port Number	Ethernet Extender Port Type
Option	- 1: 1 port	- 1: 1 port	- TB: Terminal block interface
Model Name	Description		
Available Model	IMC-V111ET-TB	Industrial VDSL extended media converter with 1x100Base-TX to 1xEthernet extender, Terminal block socket	

## Packing List

- IMC-V111ET-TB x 1
- Quick Installation Guide x 1
- DIN-Rail Kit x 1
- Wall-mount Kit x 1

## Optional Accessories

- DR-45 series : 45 Watts DIN-Rail power supply
- DR-75 series : 75 Watts DIN-Rail power supply
- DR-120 series : 120 Watts DIN-Rail power supply

## Appendix A

Loop Length (m, PE 0.4mm loop)	Annex-17a-A-17a-eu32_I-8/2			
	Downstream		Upstream	
	ActDataRate (Mbps)	Noise Margin Reported (dB)	ActDataRate (Mbps)	Noise Margin Reported (dB)
0	101.0	14.8	52.5	7.2
200	101.0	12.4	52.5	7
400	88.2	6.6	45.8	6.8
600	60.5	5.9	30.4	6.3
800	44.6	6.1	12.7	6.5
1000	33.5	6.3	5.6	6.1
1200	28.4	7.4	2.1	6
1400	21.5	7.5	0.7	6
1600	16.8	7.1	0.7	6.3
1800	12.9	7.4	0.7	6.2
2000	9.8	7.6	0.8	6.1
2200	7.7	7.4	0.8	6.1
2400	5.9	7.4	0.7	6.2

Loop Length (m, PE 0.4mm loop)	Annex-B-B7-9_I-8/2			
	Downstream		Upstream	
	ActDataRate (Mbps)	Noise Margin Reported (dB)	ActDataRate (Mbps)	Noise Margin Reported (dB)
0	71.7	7.1	76.4	7.1
200	69.6	7.7	74.7	7.1
400	60.0	7.1	65.3	6.9
600	46.8	6.4	44.6	6.5
800	37.8	6.8	19.6	6.1
1000	29.5	6.3	9.1	5.7
1200	26.1	6.8	4.2	5.7
1400	22.2	7.8	1.2	5.6
1600	18.0	7.4	0.7	6.2
1800	14.5	7.2	0.7	6.2
2000	11.5	7.2	0.8	5.9
2200	9.3	7.3	0.7	6
2400	7.4	7.3	0.6	6.1

Loop Length (m, PE 0.4mm loop)	Annex-30a-A-30a-eu32_I-8/2			
	Downstream		Upstream	
	ActDataRate (Mbps)	Noise Margin Reported (dB)	ActDataRate (Mbps)	Noise Margin Reported (dB)
0	101.0	25	101.0	8.2
200	101.0	19.4	97.1	6.3
400	100.9	6	53.3	5.7
600	60.8	5.8	32.8	7
800	39.3	5.6	15.4	8.9
1000	31.9	6.3	5.5	7
1200	29.2	7.2	2.1	6.1

Loop Length (m, PE 0.4mm loop)	Annex-B-B7-10_I-8/2			
	Downstream		Upstream	
	ActDataRate (Mbps)	Noise Margin Reported (dB)	ActDataRate (Mbps)	Noise Margin Reported (dB)
0	101.0	17.6	101.0	17.4
200	101.0	10.2	101.0	17.8
400	64.8	6.3	96.2	6.8
600	46.9	5.9	51.5	6.6
800	32.6	8.1	21.0	7.7
1000	29.2	6.3	9.1	6
1200	25.7	7.5	4.9	5.6