



CVBXW-DVI

Conversion Box – DVI to TMDS Fiber Wall Plate Type

Customer :

Specification for
Model : CVBXW-DVI

Revised : Feb. 11. 2011
Original Release Date : Jan. 26. 2010

OPHIT



Revision History

Version Number	Revision Date	Author	Description of Changes
1.0	Jan. 26. 2010	H.S YANG	Initial Version
2.0	Feb. 11. 2011	J.H LEE	Electrical Specification / Case Dimension Modify



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1. General Description

CVBXW-DVI is a media converter to convert DVI electrical signal to optical signal without any signal degradation, specially 1 fiber output to support maximum DVI-D resolutions up to 1920x1200 and 1080p.

This unit is enclosed by some box for wall mount.

- 1 DVI Single Link input, 1 fiber output to deliver TMDS signal
- Supporting resolution : VGA, SVGA, XGA, SXGA, WUXGA at 60Hz
- Automatically detects the input signal and transmit TMDS output signal
- No input signal is automatically Power-down mode(LD Turn-off)
- High Speed and long distance transmission by 1 channel SC type Multi-Mode Fiber
- DVI Specification 1.0 Compliant
- Product state define : Power ON : Green color LED ON
Input signal detect : Yellow color LED ON

2. General Specification

Input Format	DVI
Input Signal	PC : Max 1920x1200@60Hz(162 MHz)
Optical Output	SC type optical connector
Fiber	Multi-mode 50/125 or 62.5/125 μm SC fiber
Transmission distance	1,650 ft(500M)
Connector	
Input	DVI-I
Output	SC Type Optical
Power	3.5 mm pitch 3 position terminal (Phoenix Contact)
General	
Dimensions	115(W) x 70(H) x 90.6(D) mm
Weight	--
Enclosure Color	Silver
Power	DC +12V, 1.5A

3. Absolute Maximum Ratings

Parameter	Rating
Storage temperature	-20°C ~ +70°C
Operating temperature	0°C ~ +50°C
Power Supply	-0.3 ~ +12 V
Relative Humidity	10 ~ 80 %
Lead solder temperature	380°C +/-30°C, 10 seconds

NOTICE

Stresses greater than those listed under “Absolute Maximum Ratings” may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operations section for extended periods of time may affect reliability.

4. Electrical & Optical Specification

4.1 Electrical Specification

Parameter		Symbol	Min	Typ	Max	Units	Condition
POWER	Supply Voltage	Vcc		+ 12		V	
	Supply Current	Icc		100		mA	Standby
				160			Working
	Power Dissipation	Po		1.2		W	Standby
				1.92			Working

4.2 Optical Specification

Parameter (per Channel)	Symbol	Min	Typ	Max	Units
Optical Power ¹	Pout	-3.0	0.0		dBm
Optical Modulation Amplitude		-6.25			dBm
Center Wavelength – Lane 0		771.5	778	784.5	nm
Center Wavelength – Lane 1		793.5	800	806.5	nm
Center Wavelength – Lane 2		818.5	825	831.5	nm
Center Wavelength – Lane 3		843.5	850	856.5	nm
Optical Rise/Fall Time ² (P1TX4B-SX4V-01)			200		Ps
RMS Spectral Width			0.5		nm

Notes:

Transmitter module of Model CVBXW-DVI includes VCSEL (Vertical Surface Emitting Laser Diode) with 850 nm invisible laser radiation.

Do not view directly laser module of transmitter or the end of the other side of optical cable connected to transmitter with optical instrument.

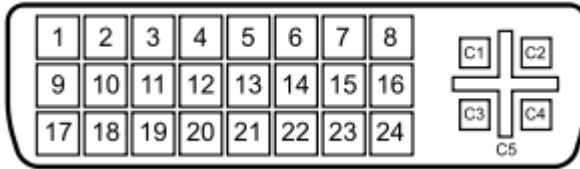
Transmitter module of CVBXW-DVI is Class 1M Laser Product.

¹ Total power at measured at 4ch on the end of 2m optical cable (62.5µm fiber).

² Rise and fall times measured from 20 - 80%

4.3 Connector Pin Assignment

4.3.1 Input Connector

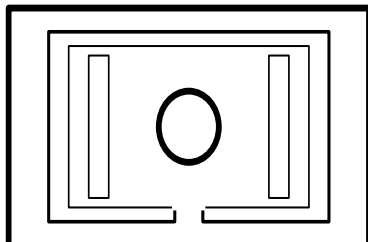


Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	CH 2-	9	CH 1-	17	CH 0-
2	CH 2+	10	CH 1+	18	CH 0+
3	CH2 Ground	11	CH1 Ground	19	CH0 Ground
4	N/C	12	N/C	20	N/C
5	N/C	13	N/C	21	N/C
6	SCL	14	+5V	22	CLK Ground
7	SDA	15	Ground	23	CLK+
8	N/C	16	Hot plug	24	CLK-
C1	Ground	C2	Ground	C3	Ground
C4	Ground	C5	Ground		

Female Connector

<DVI -I TYPE>

4.3.2 Output Connector



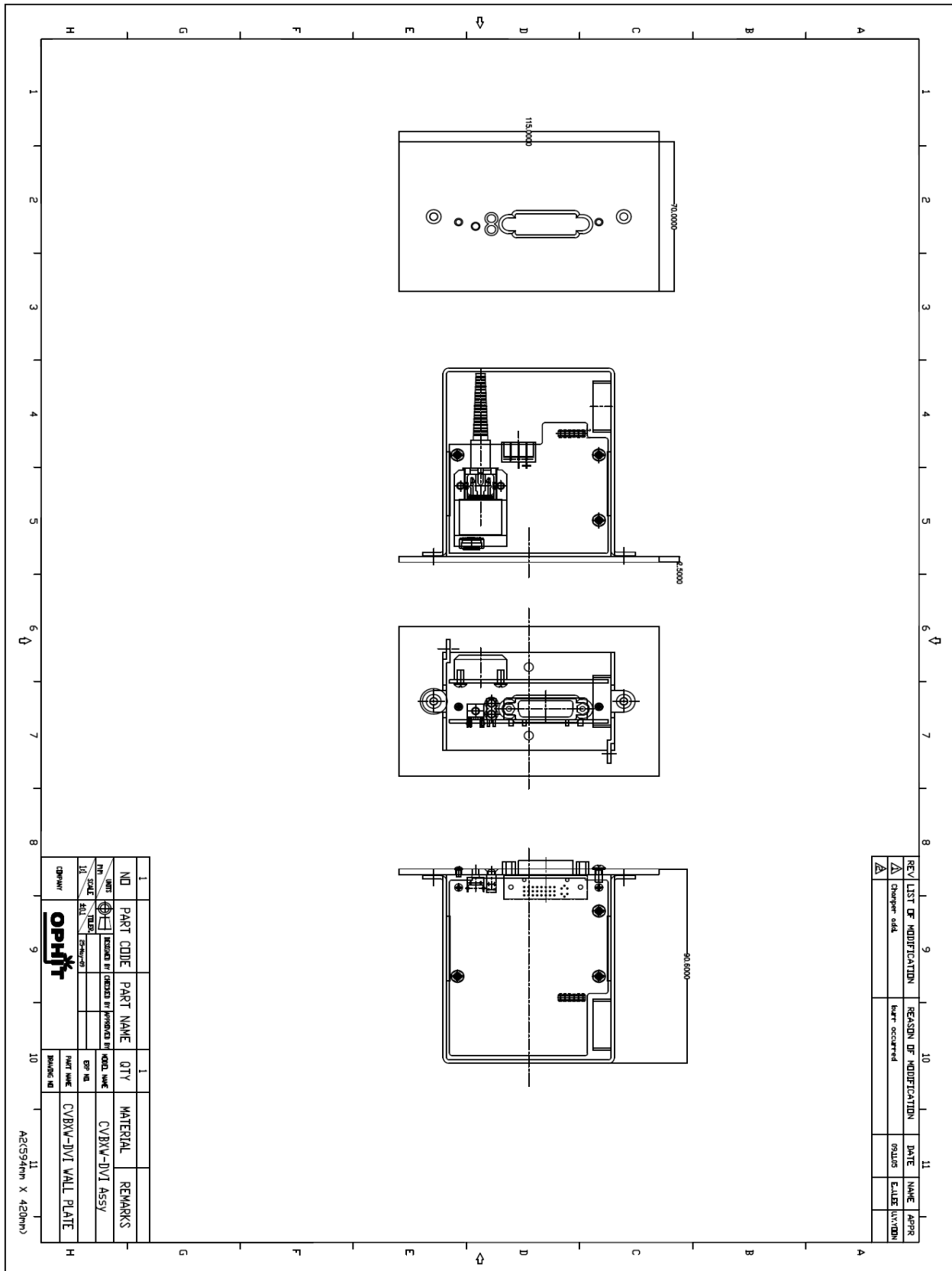
Female Connector

<SC Connector type>

Pin	Signal Assignment
1	T.M.D.S. optical output

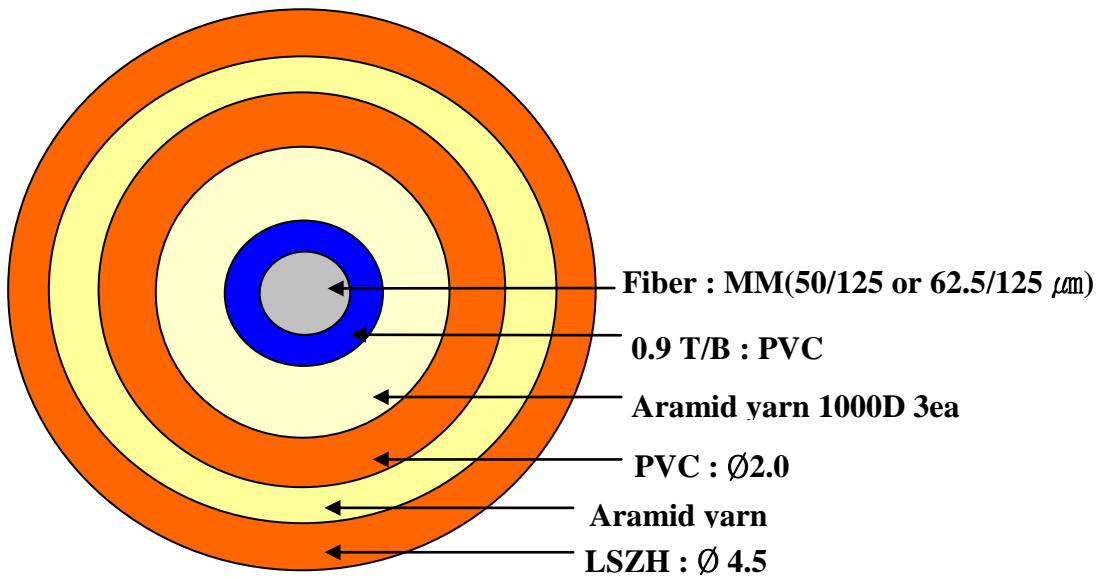
5. Mechanical Specification

5.1 Case Dimension



5.2 Optical Cable Information

- Outdoor Type Cable



6. ROHS**Certificate of Conformance RoHS**

Dear Customer,

On January 27, 2003, the European Parliament and the Administrative Council adopted Directive 2002/95/EC (RoHS) that concerns the “Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment”.

The parts currently delivered by **OPHIT CO., LTD.** are already free of lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (Cr 6), polybrominated biphenyl (PBB) and poly brominated diphenyl (PBDE).

This Certification of Conformance is to certify that the products listed below comply with RoHS Directive mentioned above:

- CVBXW-DVI

If you have any further questions regarding the RoHS compliance of parts delivered by **OPHIT CO., LTD.**, please do not hesitate to contact us at support@ophit.com.

Best regards,

JONG-KOOK MOON/CEO

OPHIT CO., LTD.