



Customer :

Specification for

Model : Vy-Net

Revised: October. 17. 2017
Original Release Date: October. 17. 2017

OPHIT

Revision History

Version Number	Revision Date	Author	Description of Changes
1.0	Oct. 17. 2017	A. Y. GO	Initial Version(Production Version)

TABLE OF CONTENTS

1. General Description

2. General Specification

2.1 General Specification

2.2 Video Input Specification

3. Absolute Maximum Ratings

4. Electrical & Specification

4.1 Electrical Specification

4.2 Connector Pin Assignment

4.2.1 HDMI Connector

5. Mechanical Specification

6. RoHS

7. REACH

1. General Description

Vy-Net is a Full-HD video over IP network solution that connects video sources to endpoint destinations. Vy-Net units can be configured as Encoder or Endpoint and can be used in a switching system (one Encoder to one, many or all End Points via Multicast) or as a simple streaming device (Encoder to PC software such as VLC via Unicast) or a combination of both. Vy-Net deploys quickly, integrates smoothly, can be updated remotely.

- Video Input: HDMI 1.3 / HDMI 1.4a 3D / DVI 1.0
- Video Output: HDMI 1.3
- Audio Input/Output: HDMI 1.3
(Single direction audio is supported. Bidirectional audio requires additional hardware.)
- Max Resolution : 1920x1080@60Hz
- Support Power over Ethernet (PoE) 13W type 1 PD, IEEE802.3 at standard
- Network Interface: RJ-45, Ethernet 10/100/1000 Mbps, DHCP
- Encoding:
 - Format: H.264/BP/MP/HP
 - H.264 Bit Rates: 1-15Mbps
- Decoding: H.264/BP/MP/HP
- Streaming:
 - Performance: H.264 @ 1080P@60fps
 - Protocols: Multicast, Unicast RTP, RTSP
- Low Latency
- External Interface:
 - USB 2.0 OTG, 2 Ports
 - Unit Reset Button
 - Factory Setting Restore Button
 - Status LEDs
- KVM: Server (HDI) and Client Side
- System Management:
 - WEB based GUI interface. REST Calls interface
 - Confidence monitoring second stream (MJPEG encoding)

2. General Specification

2.1 General Specification

Input Format	HDMI
Input Signal	Max 1920x1080@60Hz
Output Format	HDMI
Output Signal	Max 1920x1080@60Hz
Connector	
Input	HDMI A Type x 1
Output	HDMI A Type x 1
Ethernet	RJ-45 x 1
USB	Mini B Type x 2
Power	DC-JACK 2.1ø x 1
General	
Dimensions	31.2(H) x 120(W) x 80(D) mm
Weight	245g
Enclosure Color	White
Power Supply	Power Adapter DC +5V, 2A, 2.1ø or Power over Ethernet(13W type 1 PD, IEEE802.3)

2.2 Video Input Specification

Video Input Resolutions	
1080P@59/60	1280x1024@60
1080P@50	1280x768@85
1080P@30	1280x768@75
1080i@59/60	1280x768@60
1080i@50	1024x768@75
1080i@29/30	1024x768@70
720P@59/60	1024x768@60
720P@50	-
480P@60	-

3. Absolute Maximum Ratings

Parameter	Rating
Operating temperature	+5°C ~ +35°C
Non operation temperature	-20°C ~ +70°C
Power Supply	+5V
Relative Humidity	5 ~ 90%, Non-Condensing

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.

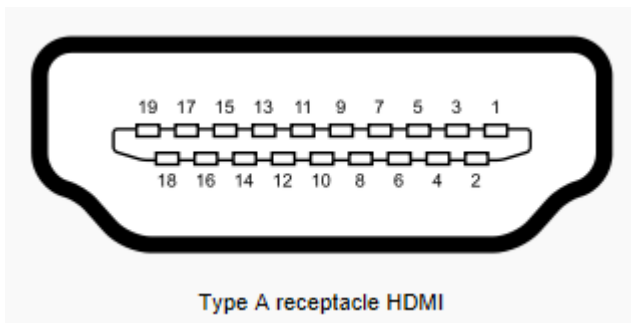
4. Electrical Specification

4.1 Electrical Specification

	Parameter	Symbol	Min	Typ	Max	Units	Condition
P O W E R	Supply Voltage (Option External Power)	Vcc		+5		V	
	Supply Current	Icc		1.3		A	1080P@60
	Power Dissipation	Po		6.5		W	1080P@60

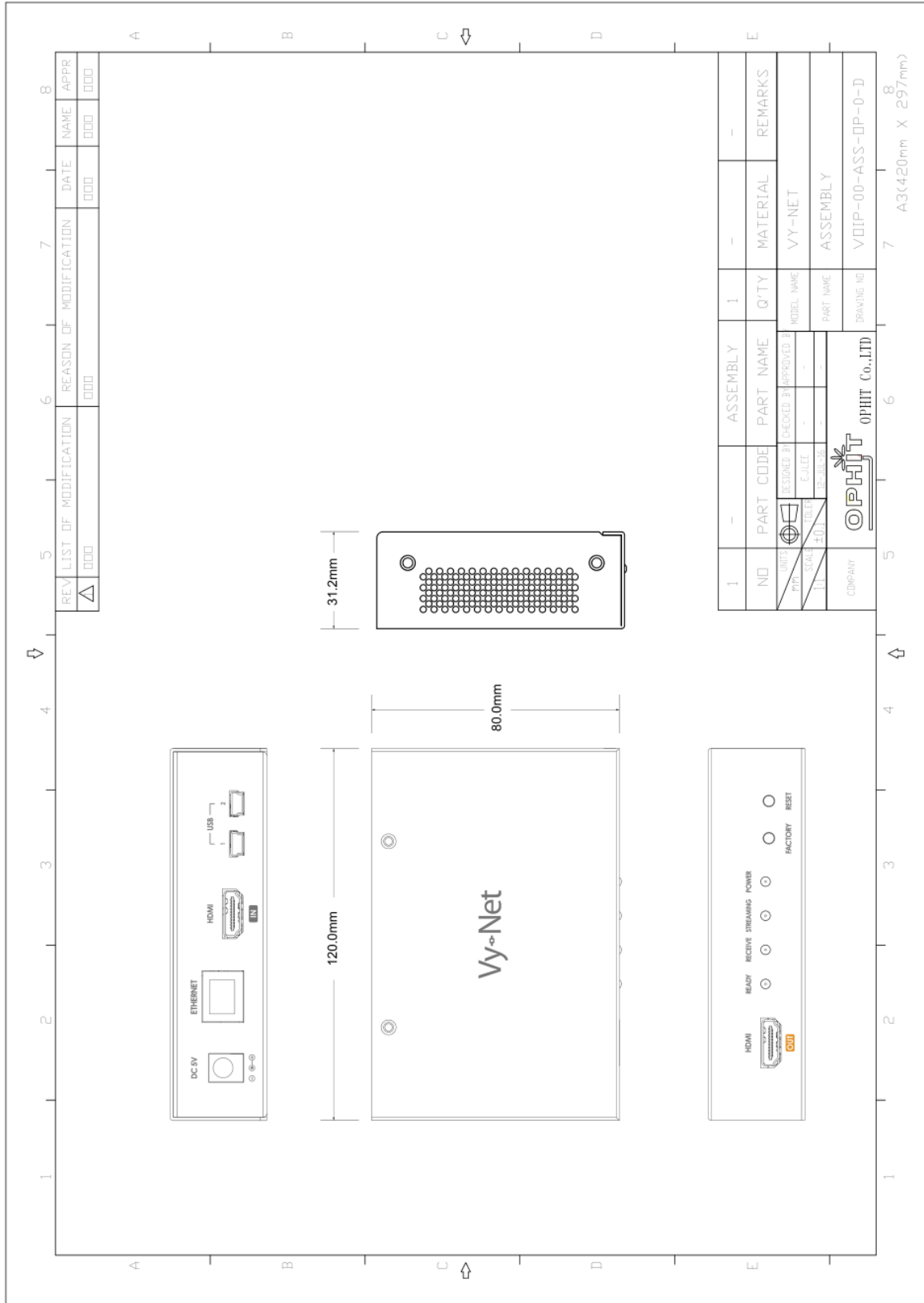
4.2 Connector Pin Assignment

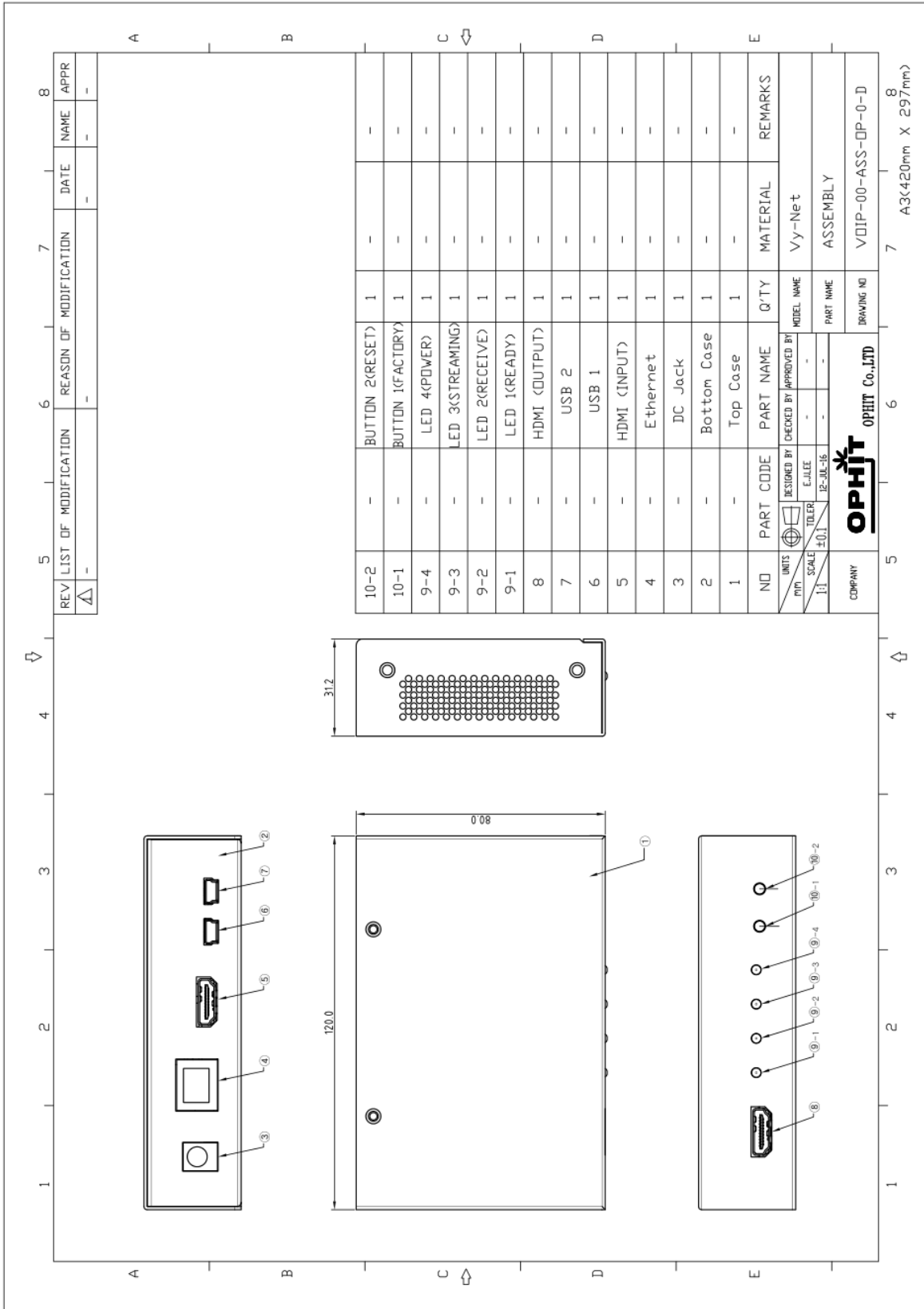
4.2.1 HDMI Connector



Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	TMDS DATA2+	9	TMDS DATA0-	17	DDC
2	TMDS DATA2 SHIELD	10	TMDS CLOKE+	18	+5V
3	TMDS DATA2-	11	TMDS CLOKE SHIELD	19	HPD
4	TMDS DATA1+	12	TMDS CLOKE-		
5	TMDS DATA1 SHIELD	13	CEC		
6	TMDS DATA1-	14	HEAC		
7	TMDS DATA0+	15	SCL		
8	TMDS DATA0 SHIELD	16	SDA		

5. Mechanical Specification





REV	LIST OF MODIFICATION	REASON OF MODIFICATION	DATE	NAME	APPR
1	-	-	-	-	-

NO	PART CODE	PART NAME	Q'TY	MATERIAL	REMARKS
10-2	-	BUTTON 2<RESET>	1	-	-
10-1	-	BUTTON 1<FACTORY>	1	-	-
9-4	-	LED 4<POWER>	1	-	-
9-3	-	LED 3<STREAMING>	1	-	-
9-2	-	LED 2<RECEIVE>	1	-	-
9-1	-	LED 1<READY>	1	-	-
8	-	HDMI <OUTPUT>	1	-	-
7	-	USB 2	1	-	-
6	-	USB 1	1	-	-
5	-	HDMI <INPUT>	1	-	-
4	-	Ethernet	1	-	-
3	-	DC Jack	1	-	-
2	-	Bottom Case	1	-	-
1	-	Top Case	1	-	-

UNITS	DESIGNED BY	CHECKED BY	APPROVED BY	MODEL NAME
MM				Vy-Net
SCALE	TOLER	E-SCALE		PART NAME
1:1	±0.1	12-JUL-16		ASSEMBLY
COMPANY	OPHIT Co.,LTD			DRAWING NO
				VOIP-00-ASS-OP-0-D

A3(420mm X 297mm)

6. RoHS



Declaration of RoHS Compliance

DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27.
January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Product Name : Vy-Net

Hereby we guarantee that we do not intentionally use the substances described below and based on third party chemical analysis the thresholds of the substances as indicated are not exceeded for our products.

Banned Substances by RoHS Directive 2011/65/EU, EN50581:2012

Substance	RoHS Limity by Weight	RoHS Limity by % (PPM)
Lead (PB)	1000mg/kg	0.1% (1000 PPM)
Mercury (Hg)	1000mg/kg	0.1% (1000 PPM)
Hexavalent Chromium (CR VI)	1000mg/kg	0.1% (1000 PPM)
Polybrominated Biphenyls (PBB)	1000mg/kg	0.1% (1000 PPM)
Polybrominated Diphenyl Ethers (PBDE)	1000mg/kg	0.1% (1000 PPM)
Cadmium (CD)	100mg/kg	0.01% (100 PPM)

Signature : Jong-kook, Moon *Jong-kook, Moon*

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7. REACH



EUROPEAN UNION'S REACH REGULATION DECLARATION CERTIFICATE

The European REACH Regulation 1907/2006 on Registration, Evaluation, Authorization, and Restriction of Chemicals(REACH), Annex XVII entered into Force in June 2009, and affects all companies producing, Importing, using, or placing Products on the European market. The aim of the REACH regulation is to ensure a high Level of protection of human health and the environment from chemical substances.

OPHIT Co., Ltd substances management system follow and complies with the current revision of the REACH Regulation on the substances as identified by ECHA(European Chemical Agency).

OPHIT Co., Ltd products are considered articles as defined in REACH Article 3(3). These products/articles under normal and reasonable conditions of use do not have intended release of substances. Therefore the requirement in REACH Article 7(1)(b) for registration of substances contained in these products/articles does not apply.

OPHIT Co., Ltd products/articles, do not contain **Substances of very High Concern** or if there **SVHC** in the product/article, the content is less than the 0.1%(wt/wt) as defined by REACH Article 57, Annex XIV, Directive 67/548/EEC. Therefore the requirement in REACH Article 7(2) to notify ECHA if a product/article contains more than 0.1% wt/wt of an SVHC and tonnage exceeding 1 tone per importer per year is not applicable.

OPHIT's European operations do not manufacture or import chemicals, therefore OPHIT Co., Ltd has no obligation to resister substances.

-Model : Vy-Net



Jong-Kook, Moon
President

OPHIT Co., Ltd ACCEPTS NO DUTY TO NOTIFY USERS OF THIS OF DECLARATION OF UPDATES OR CHANGES TO THIS DECLARATION.

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