

Customer: General User

General Specification

Model: RM-001
(19" Power Supply Rack Mount)

Revised: 09th Julyl, 2019

OPHIT Co., Ltd.

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General Specification V0.1 RM-001 (19" Power Supply Rack Mount)



1. Revision History

Version	Revision Date	Author	Description of Changes	
0.1	24/04/2019	J. H. LIM	1 st Version Specification Define	
0.2	07/07/2019	J. H. LIM	Minor Change (Dimension, Certification, RoHS)	

< Revision History >



2. Product Overview

2.1 Introduction

The 19RM-001 is a 19-inch rack mounting structure that allows one of the OPHIT products, 4K Optical Extender(FTDS or FTHS), to be installed at the same time.

4K Optical Extenders mounted on the 19RM-001 can be simultaneously powered. Also, with two built-in AC/DC power supplies, can reliably supply DC power to 4K Optical Extenders, even if one of them fails.

Up to OPHIT's eight 4K Optical Extender (FTDS or FTHS) can be installed, and it is possible to mix and match the transmitter / receiver according to the user's use.

The 19RM-001 can be easily mounted and fixed to a commonly used 19 inch rack using the screw hole on the front part.

2.2 Features

- 19 inches 2U size (Four screw holes on the front, can be mounted on commercial 19 inch rack)
- Dual AC/DC power supply (power sharing)
- Up to 8 OPHIT's 4K Optical Extender (FTDS, FTHS) can be installed.
- 8 SC type optical connectors on the front. (OM3, Up to 200m)
- Power state indicate LED x 2 (Each per AC/DC power supply)
- Eight DC cables that can be removed / installed are installed inside.
- Eight OM3 cables (22cm) that can be removed / installed are installed inside.

2.3 Applications

- OPHIT's 4K Optical Extender install system (19inch Rack mounting)
- Professional broadcasting and production studios
- Medical Center and laboratory
- Presentation application
- Display application



3. Specification

3.1 Power Specification

Items	Values / Description	
AC/DC power supply (Each)	 ■ Input ■ Voltage Range: 90~264VAC ■ Frequency Range: 47~63Hz ■ Leakage Current (max): Earth < 130uA/264VAC ■ Output ■ DC Voltage: 5V (10A) ■ Current Range: 0~11A ■ Rated Power: 50W 	
Total Power consumption (in case, eight 4K Extender installed)	■ Power: 5V DC, Max. 2.2A	

< Power Specification >

3.1 Accessories Specification

Items	Values / Description	
Inside Installed Optical Cable	■ OM3, 22cm, 8EA, Can be detachment	
Inside Installed Electric Cable	■ Circular type, 15cm, 8EA, Can be detachment	

< Accessories Specification >



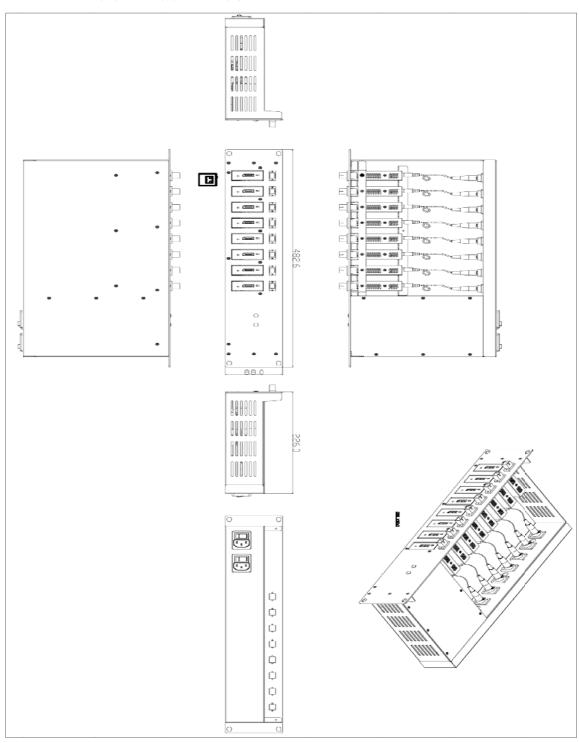
4. Dimension

■ 19RM-001 Construction Features

• Front : SC Type Jack x 8, LED x 2, Screw hole x 4 / Back : AC Jack x 2

• Inside : DC Jack x 8, SC Type Jack x 8

• Size: 482.6(W) x 88.0(H) x 226.0(D)



< 19RM-001 Dimension >



5. Manual

- Installation and operating manual shall be provided
 - English

6. Certifications

■ CE-EMC, Safety

7. Environment Requirement

7.1 Operating

■ Temperature : 0°C ~ +40°C

■ Humidity: 10 ~ 80 %, Non-Condensing

7.2 Storage

■ Temperature : -10°C ~ +70°C

■ Humidity: 10 ~ 80 %, Non-Condensing

7.3 Transportation

■ Temperature : -10°C ~ +70°C

■ Humidity: 10 ~ 80 %, Non-Condensing

8. Absolute Maximum Ratings

Parameter	Rating		
Storage temperature	-10°C ~ +70°C		
Operating temperature	0°C ~ +40°C		
Power Supply	264VAC		
Relative Humidity	10 ~ 80 %, Non-Condensing		

< Absolute Maximum Ratings >

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.

CE Declaration of Conformity

OPHIT CO., LTD

3F Suntechnovil, 77Deyoung-daero 1471beon-gil, Yongtong-gu, Suwon-city Gyeonggi-do, Korea

EU Authorized Representive: Foreseeson GmbH

Industriestasse 38a, 63150 Heusensramm, Germany(Tel +49(0) 6104-64398-20

Declare under our sole responsibility that the product

Product: 19inch Power Supply Rack Mount

Model: 19RM-001

To which this declaration relates in conformity with the following standards or normative documents;

EMC Part

EN 55032 : 2015 EN 55035 : 2017

EN 61000-3-2 : 2014(IEC61000-3-2 : 2014) EN 61000-3-3 : 2013(IEC61000-3-3 : 2013)

Safety Part

IEC 60950-1:200 5+Am 1:2009 +Am 2:2013

EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013

RoHS

RoHS Directive 2011/65/EU+2015/863/EU

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s)

Manufacture Signature

Date of issue: May, 2019

Signature: Jong-Kook, Moon Jong-kook, Moon

OPHIT CO.,LTD.

3F, Suntechnovil, 5-27 Mangpo-Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea



Declaration of RoHS2 Compliance

Company Name: OPHIT CO LTD

301,302,501,502Ho,77,Deogyeong-daero 1471beon-

Yeongtong-gu, Suwon-si, Gyeonggi-do, KOREA

Contact Person: Eui-Seok, Kang/Q.A Manager/82-31-205-

Contact E-mail: onlyqa@ophit.com

The European Union Directive 2011/65/EC, Restriction of Hazardous Substances (RoHS 2) legislation restricts the use of certain substances in electrical and electronic equipment. On June 4, 2015, the EU Commission published new Directive (EU) 2015/863 which adds 4 phthalate substances to the list of 6 already in RoHS II. These phthalates will be restricted from use starting July 22, 2019 from most electrical and electronic equipment.

Product Name: 19RM-001

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+2015/863/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)
Bis(2-Etylhexyl) phthalate(DEHP)	1000mg/kg	0.1% (1000 PPM)
Benzyl butyl phthalate(BBP)	1000mg/kg	0.1% (1000 PPM)
Dibutyl Phthalate(DBP)	1000mg/kg	0.1% (1000 PPM)
Disobutyl Phthalate(DIBP)	1000mg/kg	0.1% (1000 PPM)

Signature : Jong-kook, Moon Jang-kook, Moon

Title/Date: President/May.01.2019



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: 19RM-001

OPHIT CO.,LTD.

3F, Suntechnovil, 5-27 Mangpo-Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea

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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