# SE-RM-19-RAID-1U-323-U 1U Rack Mount USB 3.1 Gen II 2 Bay RAID Hard Disk Enclosure

**User Manual** 

#### Introduction

This manual will introduce the SE-RM-19-RAID-1U-323-U 1U Rack Mount RAID Enclosure. Although all information contained in this user manual has been carefully verified before publishing, however, the actual product specification will be based on the time of delivery from SEDNA. Any updates to the product specifications may be found on www.sednacomputer.com.

Products are subject to change without prior notifications.

# **Safety Warning**

Read the operating instructions carefully and especially observe the safety information. If you do not follow the safety instructions and information on proper handling in this manual, we assume no liability for any resulting personal injury or damage to property. Such cases will invalidate the warranty/guarantee.

- Do not leave packaging material lying around carelessly. These may become dangerous playing material for children.
- The device is designed for indoor use only. Protect the product from extreme temperatures, direct sunlight, strong jolts, high humidity, moisture, flammable gases, vapours and solvents.
- Do not place the product under any mechanical stress.
- Always unplug the power cord before installing the unit

# 1. Package Content

1 x 1U RAID Enclosure

1 x USB 3.1 Cable

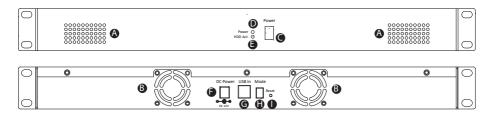
1 x 12V 3A AC/DC Power Supply

1 x User Manual

2 x Sever Cabinet Mounting Bracket and Screws set

# 2 Specifications and Features

#### Front and Rear View



A. Vent
D. Power Indicator
G. USB 3.1 Input

B. Cooling Fan
E. Hard Disk Activities Indicator
H. RAID Mode Setting Switch

C. Power Switch F. DC Power Supply Input

I . Reset Switch

Size: 483x44.5x135mm (19 inch 1U Rack Mount Compatible)

1U server cabinet mounting design, easily expand storage capacity of your Server or Low Cost NAS

Support 2 Internal HDD / SSD

Support hardware RAID 0/1/JBOD/SPAN (BIG) mode

Power and HDD status LED Easy Mode Setting by Switch

Transfers your data at up to 10Gbps

Maximum Transfer Speed: 800MB/s (USB 3.1 Gen II, Dual SSD in RAID 0 Mode)

Installs easily with Plug-and-Play convenience

Support 2TB+ Hard Disk

Support Sleep and Wake up mode from USB Bulit-In Cooling Fans for long time operation

#### **USB** Features

Support USB SuperSpeedPlus, USB SuperSpeed, High-Speed, and Full-Speed Operation.

Support Mass Storage Class, Bulk-Only Transport Specification Revision 1.3

Support Universal Attached SCSI Protocol Specification Revision 1.0

Compliant with USB3.1 Specification Revision 1.0

Compliant with USB specifications Revision 2.0

## Serial ATA Features

Support SATA NCQ command

Support over 2TB drives (10TB capacity HDD tested)

Power down capable for each storage drive

### **RAID Features**

Support hardware RAID 0/1/JBOD/SPAN (BIG) mode

RAID mode switch

Failed or degraded drives detection and report

Automatic background rebuilding

SMART drive monitoring

## 3 Installation

- Step 1 Open the package and take out the product and make sure that all the enclosed contents are not damaged or missing. Should you find damages or missing contents, please contact your supplier immediately.
- Step 2 Remove all Power and USB connection from the enclosure
- Step 3 Remove the 3 screws on the back to open the top cover
- Step 4 Slide the Hard Disk Mount side way and then pull it slightly upward to remove the Mount out from the case as shown in figure 2



Figure 1 Figure 2

- Step 5 Mount the hard disks to the Mounting Brackets with 4 pieces of screws included in the package (As shown in Figure 3)
- Step 6 Slide the Mounting Brackets with Hard Disk back to the metal stud and make sure that the SATA connector of Hard Disk are inserted properly into SATA connector on PCB of the enclosure
- Step 7 Lock the Mounting Brackets with 2 screws included in package to bottom case of the enclosure (Figure 4)



- Step 8 Insert the Top Cover back and lock the 3 screws on the back of the case
- Step 9 If the case is to be mounted in a server rack, you can install the 2 Sever Cabinet Mounting Brackets included to left and right side of front panel
- Step 10 Plug in Power AC/DC adapter and the USB cable to Server or PC, your storage enclosure is now ready for operation

# 4 RAID Mode Setting

Storage Mode Definition for Supported RAID mode

Independent mode ( JBOD ): Two independent storage disks. ( this is the factory default setting ) Speed mode ( Raid 0 ): One large independent storage disk for fast data access, but no data redundancy. Safe mode ( RAID 1): Mirrored storage capacity allowing data protection.

Span: One large storage disk without fast data access and without data redundancy.

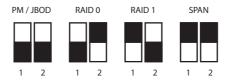


Figure 5: RAID Mode DIP Switches Setting

To Change the RAID model setting, Plesae follow the following procedures :

- Step 1 Set the DIP switches at the back of the unit to the RAID Mode you need (Figure 5)
- Step 2 Press the reset switch at the back for 10 seconds and release it
- Step 3 Power Off the unit and Power On it again
- Step 4 The required RAID mode is now set

## Important Remark:

- 1) Hard Disk will be re-formatted during RAID Mode change, make sure you have back up all data before make the change
- 2) To change the RAID mode from RAID 0, RAID 1 and SPAN to other setting, you need to set it back to PM / JBOD mode first. Then set it again to the RAID Mode you need as shown from Step 1 to Step 4 above

# 5 Driver Installation

No driver installation is required for all Windows / Mac OS / Linux.

 $You \ may \ need to \ Initialize \ your \ RAID \ storage \ , set \ storage \ partitions \ and \ format \ the \ Drives \ to \ NTFS, \ HFS+..etc \ according \ to \ your \ system$