

SAS/SATA Storage System

Installation Guide

English



LINDY No. 21950, 21951, 21953

www.lindy.com

Tested to Comply with FCC Standards
Assembled from FCC/UL compliant products
For Commercial Use Only!

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Overview

Direct Attached Storage (DAS) Systems like the LINDY SAS/SATA 19" Storage Enclosures series provide the highest performance and the easiest way to expand the storage capacity of a server which has no remaining space for further internal hard drives. Direct Attached Storage (DAS) does not require any further operating systems or appliances to provide storage to a server. Any Software can access files on this storage and there are no restrictions such as those known for Network Attached Storage (NAS) i.e. in connection with MS SQL databases.

The LINDY SAS/SATA Storage Systems connect to the server via the most up to date, high bandwidth MiniSAS interface that transmits data with the true speed of the hard disk drives without introducing any bottlenecks. A single MiniSAS cable contains 4 channels and connects up to 4 hard disk drives. It connects either to a SAS or SATA Multilane controller either on the motherboard or an additional PCI/PCIe controller card installed in the server. The controller configures the drives as a RAID array with features depending on the properties and settings of the controller.

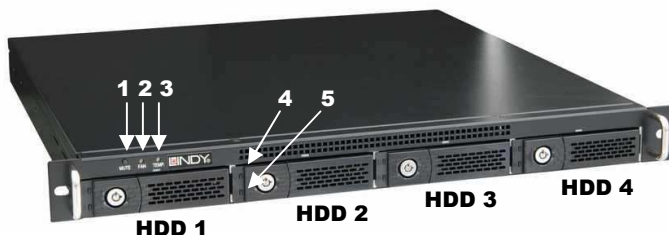
The enclosures are available with either 4, 8 or 16 SAS/SATA 3.5" HDD lockable trays with corresponding 1x, 2x or 4x MiniSAS SFF8088 interfaces. When used with SAS Expanders these storage systems can be extended up to 80 or more hard disk drives connected to a single controller.

The enclosures are equipped with a fan and overheating control system. If a fan fails or if the temperature exceeds 55°C / 130°F an acoustic alarm and front panel LED alarm will be raised to highlight the problem. This alarm can be reset by a push button on the front panel.

The enclosures are equipped with IPC-grade Power Supplies. For redundant power versions please contact our support team.

19" 1U SAS/SATA Storage System 4 Bay, No. 21950

- 19" 1U SAS/SATA backplane enclosure 4 bay
- 4 x 3.5" SAS/SATA HDD lockable tray with power and activity LED
- Interface: 1 x MiniSAS SFF8088 for 4 x SAS/SATA HDD
- 1 x D9M connector for sideband function
- 2 hot swap cross flow fans 7.5x7.5x2.8 cm, fixed on individual modules with 2 knurled thumb screws each
- IPC grade Power Supply 100 - 240VAC, 50/60Hz, ~220W
- Dimensions approx. (WxDxH): 48.2 x 49 x 4.4cm
- Weight approx.: Enclosure: 7.5kg / Total (incl. pack.): 11.5kg



- 1: Mute Button – Reset for acoustic alarm
- 2: Fan Status LED: Normal – Green; Fail – Red (too slow or stopped)
- 3: Temperature LED: Normal – Green; Over 55°C – Red
- 4: HDD power LED
- 5: HDD Activity LED



MiniSAS SFF8088 D9 male for sideband / SGPIO

19" 2U SAS/SATA Storage System 8 Bay, No. 21951

- 19" 2U SAS/SATA backplane enclosure 8 bay
- 8 x 3.5" SAS/SATA HDD lockable tray with power and activity LED
- Interface: 2 x MiniSAS SFF8088 for 8 x SAS/SATA HDD
- 1 x D9M connector for sideband function
- 2 hot swap fans 6x6x2.5 cm, fixed on individual modules with 2 knurled thumb screws each
- IPC grade Power Supply 100 - 240VAC, 50/60Hz, ~300W
- Dimensions approx. (WxDxH): 48.2 x 49 x 9 cm
- Weight approx.: Enclosure: 9.6kg / Total (incl. pack.): 13.6kg



- 1: Mute Button – Reset for acoustic alarm
- 2: Fan Status LED: Normal – Green; Fail – Red (too slow or stopped)
- 3: Temperature LED: Normal – Green; Over 55°C – Red
- 4: HDD power LED
- 5: HDD Activity LED



2 x MiniSAS SFF8088

D9 male for sideband / SGPIO

19" 3U SAS/SATA Storage System 16 Bay, No. 21953

- 19" 3U SAS/SATA backplane enclosure 16 bay
- 16 x 3.5" SAS/SATA HDD lockable tray with power and activity LED
- Interface: 4 x MiniSAS SFF8088 for 16 x SAS/SATA HDD
- 2 x D9M connector for sideband function
- 3 hot swap fans 8x8x2.5 cm, fixed on individual modules with 2 knurled thumb screws each
- IPC grade Power Supply 100 - 240VAC, 50/60Hz, ~400W
- Dimensions approx. (WxDxH): 48.2 x50 x 13 cm
- Weight approx.: Enclosure: 13.6kg / Total (incl. pack.): 17.6kg



- 1: Mute Button – Reset for acoustic alarm
- 2: Fan Status LED: Normal – Green; Fail – Red (too slow or stopped)
- 3: Temperature LED: Normal – Green; Over 55°C – Red
- 4: HDD power LED
- 5: HDD Activity LED

Package Contents

- | | |
|----|---|
| 1x | Enclosure with 4x/8x/16x HDD Tray |
| 1x | Power Cord |
| 1x | This Manual |
| 1x | Polybag with Hard Drive Mounting Screws |
| 2x | Key for HDD tray |

D9 Male Sideband / SGPIO Remark

The D9M connector for sideband function is compliant with SGPIO signal for enclosure management for Areca's SAS and SATA controllers ARC-1231ML, 1261ML and 1281ML and compatibles,

Technological Change Remark

The provided information is subject to technological development and change. Therefore product features and design may be adapted and vary slightly.

CE/FCC Statement

CE

This device complies with the European Regulations for Electromagnetic Compatibility (EMC) of the European Union and it is equipped with the CE mark.

FCC

This device has been assembled from FCC and UL compliant components. It complies with part 15 of the FCC Rules for a Class A product for Commercial Use only.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.



4x MiniSAS SFF8088
2x D9 male for sideband / SGPIO

Recycling Information



WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

United Kingdom

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.

Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products.

More details can be obtained from your national WEEE recycling agency.

Germany

Die Europäische Union hat mit der WEEE Richtlinie umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet das Entsorgen von entsprechenden, auch alten, Elektro- und Elektronikgeräten über die Hausmülltonne!

Dies ist ein B2B Gerät welches nicht den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden darf! Es muss auf eigene Kosten fachgerecht recycelt oder an den Hersteller LINDY zurückgegeben werden.

France

En 2006, l'union Européenne a introduit la nouvelle réglementation (DEEE) pour le recyclage de tout équipement électrique et électronique.

Chaque Etat membre de l'Union Européenne a mis en application la nouvelle réglementation DEEE de manières légèrement différentes. Veuillez suivre le décret d'application correspondant à l'élimination des déchets électriques ou électroniques de votre pays.

Italy

Nel 2006 l'unione europea ha introdotto regolamentazioni (WEEE) per la raccolta e il riciclo di apparecchi elettrici ed elettronici. Non è più consentito semplicemente gettare queste apparecchiature, devono essere riciclate.

Ogni stato membro dell' EU ha tramutato le direttive WEEE in leggi statali in varie misure. Fare riferimento alle leggi del proprio Stato quando si dispone di un apparecchio elettrico o elettronico.

Per ulteriori dettagli fare riferimento alla direttiva WEEE sul riciclaggio del proprio Stato.

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