



NVMe, SAS, SATA SSD Duplicator

PHS-SAS Series

PHS-SAS Series is a duplicator can support NVMe, SAS and SATA signals. The unique multitasking technology is capable to handle copy jobs simultaneously without speed degradation.

Features

Ultra-high Copy Speed

Embedded controller is designed with dedicated bandwidth for each port. Enables 1-11 duplication at 24 GB/min.

Cable-free Hardware Design

Modular-designed ports effectively reduce downtime and is cost-effective for long-term ownership.

CRC Checksum

Activates CRC Checksum mechanism at the time of duplication and carry out bit by bit comparison to ensure the accuracy of the data copied.

```
Pass:20 Fail:0 40:00
CRC:7073923CEBDF7B58
```

Event Log Management

- Records: operating durations, individual port copy progressions, connected device models, capacities, serial numbers, and PASS or FAIL results.
- Device writing/reading speeds are recorded.
- Log report files are generated through the front USB port and are saved to USB devices.

*Note: While doing cross-signal copy of OS system, please be aware of the limitation of drivers and execution path.

Non-PC-based, Hot Swap Supported

Stand-alone, FPGA-based operation. Supports hot swapping of devices.



Cross-interface Duplication

Auto-detect NVMe & SATA signal facilitates and supports cross- interface/signal duplication.*

Image Management (Optional)

Allows user to transfer multiple master images from PC and store them in the duplicator's optional internal storage device.

Product Models

Photos	Models	Target Ports	Product Dimensions	Package Dimensions	Package Weight
	PH600-SAS	1:5	38.5 x 25.5 x 27.5 cm	54 x 44 x 41 cm	13.3 Kg
	PH1100-SAS	1:10	38.5 x 45.3 x 28 cm	78 x 54 x 51 cm	21.5 Kg

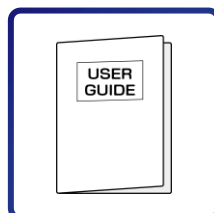
Standard Accessories



Duplicator
x 1



Power Cord
x 1



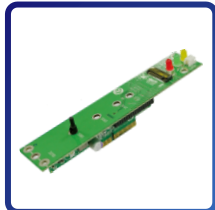
User Manual
x 1



Grounding Cable
x 1

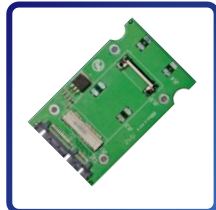
Optional Accessories

TB1587



M.2 Socket

P1051



mSATA to SATA
Adapter

P1053



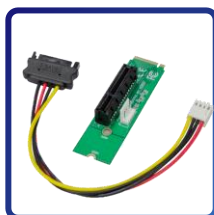
CFAST to SATA
Adapter

P2001



CFexpress
Adapter

P2002



PCIe Adapter

U1072



MAC PCIe
Adapter

Specifications

Bandwidth Performance 24GB/min
Actual performance is dependent on Device transfer speeds

Supported Formats Quick Copy (System and Files): FAT16/32/exFAT, Windows (NTFS), Linux(Ext2/Ext3/Ext4), and Mac(HFS/HFS+/HFSX)
Whole Device Copy: All formats, including proprietary formats.

Supported Capacity Over 18TB+.

Supported OS All (Windows, Mac, Linux, and other proprietary systems)

Operation Mode Standalone, FPGA-based Operation

Functions

Copy Modes	Quick Copy (System and Files) / All Partitions / Whole Device / Percentage Copy
Compare (Verification)	Bit-by-bit data comparison from the source device to target device(s).
Sanitization Modes	Quick Erase, Full Erase (NIST 800-88), DoD Erase (DoD 5220.22-M), Secure Erase (NIST 800-88).
Log Manager	Manage and export log reports.
Others	Skip Bad Sectors, Copy or Skip Unknow Format.
Image Management (Optional)	Transfer multiple image files from PC to internal storage device in duplicator.

Compatibilities

Compatible Device	<ul style="list-style-type: none"> • Directly compatible with : M.2(NGFF) M Key & B+M Key, SATA interface, SAS interface. • Compatible through optional modules: mSATA, CFast, MAC PCIe, CFexpress, etc.
Compatible Signal	SAS, NVMe, AHCI, SATA
Others	Supports GPT, MBR, and Advanced Formats.

Hardware Specifications

LCD Display	2x20 Backlit Monochrome LCD Display	
LEDs	3 LED Indicators per Port: Yellow (Power), Green (Pass), Red (Fail)	
Control Panel	4 Push Buttons (▲, ▼, OK, ESC)	
Power Requirements	AC 100~240 V	
Temperature	Working: 5° C ~ 45° C	Storage: -20° C ~ 85° C
Humidity	Working: 20% ~ 80%	Storage: 5% ~ 95%

**Specifications subject to change without notice.