

2.5 inch drive holder

The Shuttle XPC Accessory PHD3 allows for installation of up to two 63.5mm (2.5") hard drives or SSDs into a larger 89 mm (3.5") drive bay.

Feature Highlights

Scope of delivery

- Drive bracket (x1)
- Screws (x8)

Compatibility

- Compatible with the 3.5" bay of the XPC's drive rack
- With a second PHD3 up to four 2.5" drives can be installed. Please note that a fourth 2.5" drive can only be installed in XPCs of the J- and R-series.
- Please check the number of available SATA data and power connectors. Current XPC models usually offer four SATA data connectors and three SATA power connectors.

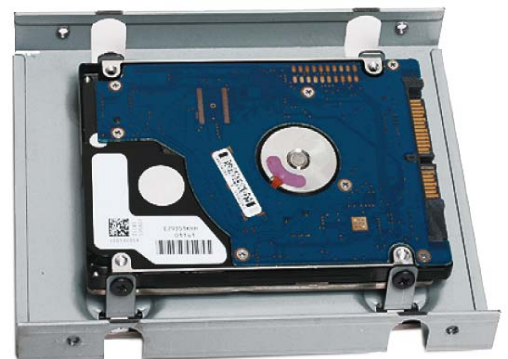


Shuttle XPC drive rack (example)

5.25" bay for the optical drive

3.5" bay with one 3.5" hard disk

3.5" bay with two 2.5" hard disks and **PHD3** accessory



Product PHD3

Order No: POC-PHD3



Images for illustration purposes only.
Hard disks are not included in the package.

Shuttle XPC Accessory PHD3 – Examples of configuration

XPC drive rack

Accessories



This configuration correspond to example 4

PHD3 bracket

Y adapter for SATA power cable



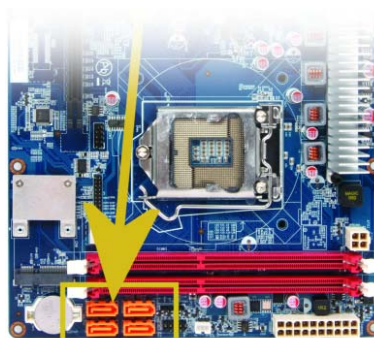
Applicable expansion card with internal SATA-connectors



		Example 1	Example 2	Example 3	Example 4	Example 5	Example 6
Drives in the XPC rack	5.25" bay	DVD R/W	DVD R/W	DVD R/W	DVD R/W	-	DVD R/W
	3.5" bay #1	Card reader	3.5" HDD	Card reader	3.5" HDD	2.5" HDD + 2.5" HDD	2.5" HDD + 2.5" HDD
	3.5" bay #2	3.5" HDD	3.5" HDD	2.5" SSD + 2.5" HDD	2.5" HDD + 2.5" HDD	2.5" HDD + 2.5" HDD	2.5" HDD + 2.5" HDD
Required accessories	PHD3 bracket	-	-	1	1	2	2
	Y adapter	-	-	-	1	1	2
	SATA card	-	-	-	-	-	1

Remarks:

In general, current Shuttle XPC models have four onboard connectors for SATA data cables and three SATA power cables coming from the integrated power supply (also two Molex connectors). If more connectors are required then you can add appropriate adapters or expansion cards.



Mainboard connectors for SATA data cables



SATA power cable



SATA data cable

SATA	Serial ATA = the current standard connectors for hard disk and optical drives in the PC
HDD	Hard Disk Drive – the size is either 3.5" (8.9 cm) or 2.5" (6.35 cm)
SSD	Solid State Disk = a flash memory device with the same connectors as a hard disk drive You can easily replace a hard disk with a solid state disk in a 2.5" bay.
DVD R/W	5.25" (13.3 cm) DVD writer. You may also use a Blu-ray drive instead.
Card reader	An open 3.5" bay and an appropriate USB header is required for an internal 3.5" card reader device.
Y adapter	In general, current XPCs have three SATA power connectors. Another connector can be provided by using an optional Y-adapter. You can also use a Molex-to-SATA-adapter.
SATA card	In general, current XPCs have four SATA data connectors. More connectors can be provided by adding a suitable expansion card. This might also be useful, if you need a special RAID controller.
4x HDD	With two PHD3 brackets you can install four 2.5" hard disks, provided you have an H- or J-series XPC. Other XPCs accept three 2.5" hard disks only.

Shuttle XPC Accessory PHD3 – Installation Guide



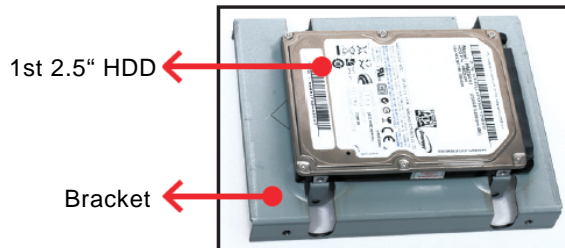
Note: One PHD3 accessory is suitable to hold up to two 2.5 inch (6.35 cm) drives. These can be hard disks (HDD) or Solid State Disks (SSD).

- **Contents:** 2.5 inch HDD Bracket (x1), Screws (x8)
- Please install with reference to the following steps

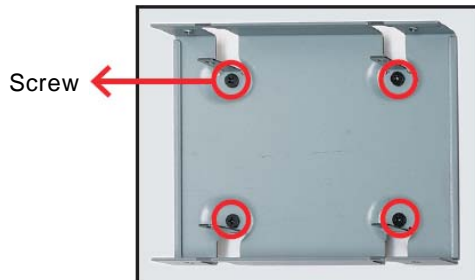


Note: Before removing the system's case, please first turn off your computer and unplug it from the mains for safety reasons.

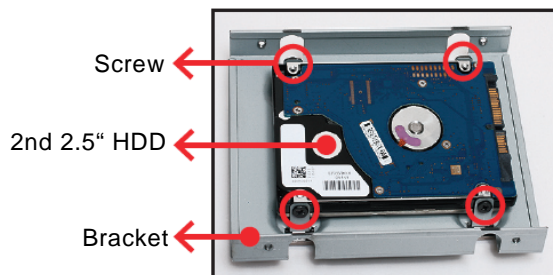
1. Place 1st 2.5 inch HDD on top of the bracket as shown.



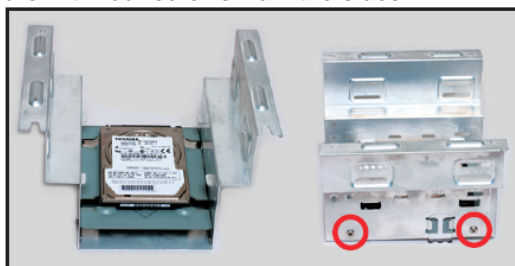
2. Turn the bracket upside down and tighten the HDD & bracket with four screws.



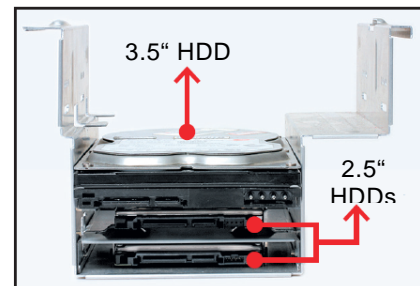
3. Place 2nd 2.5 inch HDD on the bracket and secure with four screws from the sides as shown.



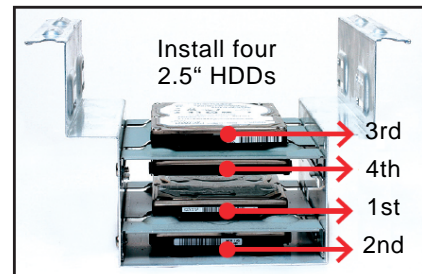
4. Place the 2.5 inch HDDs and bracket in the rack and secure with four screws from the sides.



Note: It can also be set up as follows:
1 x 3.5" HDD + 1 x 2.5" HDD or
1 x 3.5" HDD + 2 x 2.5" HDD



5. Repeat to install additional 3rd, 4th 2.5 inch HDDs, if desired. Please note in this case a second PHD3 is required.



Note: An optical drive (ODD) will not be supported, if 4x 2.5" hard disks (HDDs) are installed.

6. If your XPC is a H3/H7 Series, you may install three 2.5 inch HDDs as the maximum as shown.

