

DVS SlimBOX SPARK4-A4000 PRO



Overview

The SPARK is the entry level in our range of media servers. Supporting up to four display outputs, the SPARK is a great solution for interactive and standalone custom rendered content.

The DVS SlimBOX SPARK4-A4000 Pro is a fantastic mid-range performance small form-factor system. The dedicated A4000 Pro graphics card delivers excellent graphical performance and the intel-based processors options allow up to 8 cores and 16 threads for demanding single and multi-threaded workloads. The professional level graphics card gives great performance as well as additional features such as EDID emulation, supplying an extra level of reliability and in the Pro+ version (sync module) the server can frame lock between multiple units, or Genlock to an external source. The PCIe 4.0 NVMe M.2 slot allows for blistering fast storage options. There is also a PCIe 3.0 NVMe M.2 slot available for a secondary NVMe drive. The two 2.5" drive bays allow for higher capacity storage and RAID options. The SlimBOX SPARK4-A4000 Pro is excellent for local 3D interactives and demanding digital signage applications.

Specifications

- DVS SlimBOX Chassis - 377 x 82 x 330mm (WxDxH mm)
- 650 Watt PSU – 100 – 240V~, 10A, 50 – 60Hz
- Mini ITX Motherboard (Intel Z590 Chipset)
- Intel Processor (4, 6 or 8 core with Hyperthreading)
- 8 / 16 / 32GB DDR4 Dual Channel Memory
- nVidia A4000 Graphics Card (Up to 4 concurrent displays)
- 2 x NVMe M.2 Storage (Up to 2TB)
- 2 x 2.5" SATA Storage (Supports RAID 0 & 1)
- 1 x 1 Gigabit Network Port
- 1 x 2.5 Gigabit Network Port
- Intel® 802.11ax WiFi Module + Bluetooth 5
- Operating System - Windows Enterprise IoT LTSC 2019 or Windows 10 Pro
- Optional Extras (Variants)
 - Sync Module
 - 2 x 2.5" SSD RAID (RAID 0 & 1)

Variations

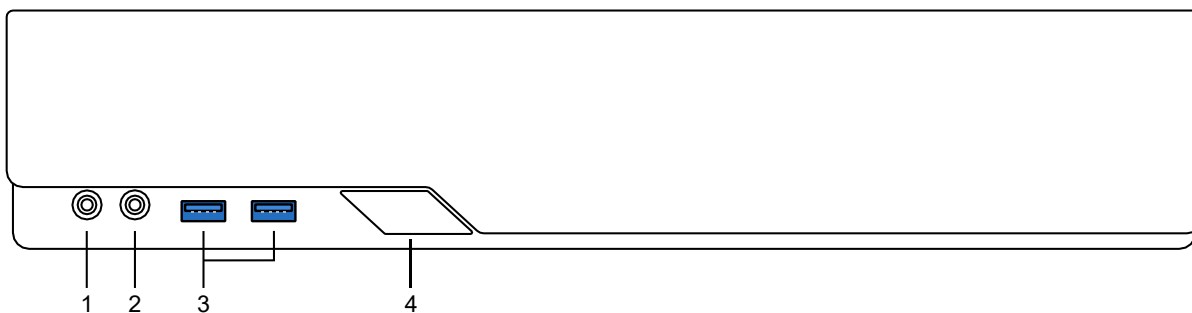
Model Number	SSD RAID	Sync Module
SlimBOX SPARK4 -A4000 Pro		
SlimBOX SPARK4 -A4000 Pro+		Yes
SlimBOX SPARK4-R5-A4000 Pro	Yes	
SlimBOX SPARK4-R5-A4000 Pro+	Yes	Yes

Graphics Card

Chipset	RTX A4000
Microarchitecture	Ampere
Memory	16GB GDDR6
Memory Bandwidth	448 GB/s
Interface	PCIe 4.0 (x16)
Microsoft DirectX Support	12 API
HDCP Ready	Yes
Maximum Concurrent Displays	4 Displays
Maximum Digital Resolution	7680x4320 @ 60Hz (8K UHD)
Outputs	4 x DisplayPort 1.4
EDID Emulation	Yes
Sync Module Supported	Yes
Supported API's	DirectX 12.0, OpenGL 4.5, Shader Model 5.1, Vulkan 1.0

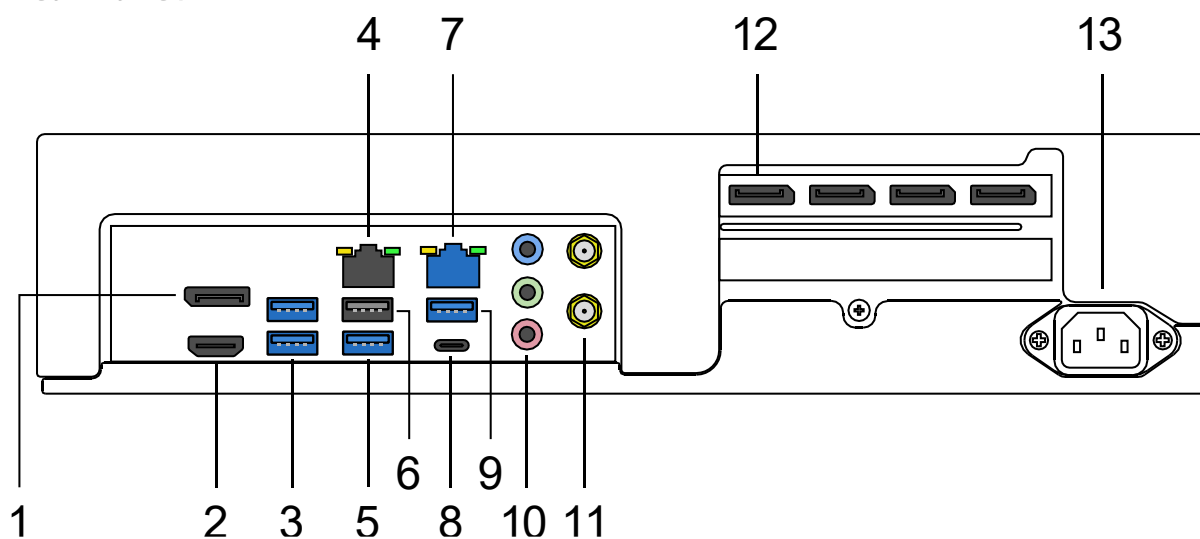
Connectors

Front Panel

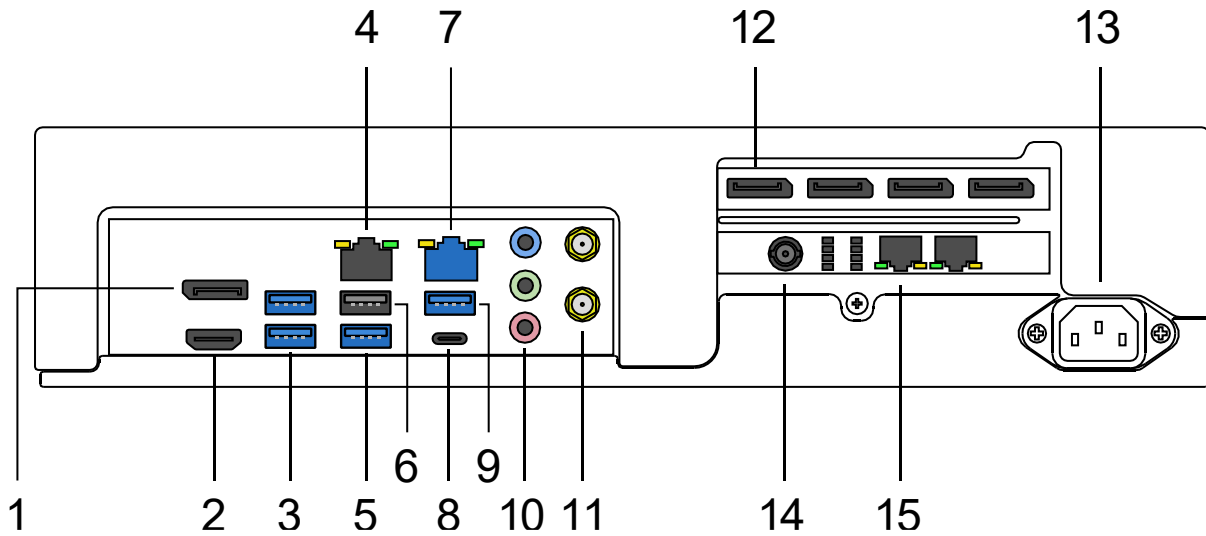


- 1. **Mic Audio Input**
- 2. **Headphone Audio Output**
- 3. **USB 3.0 Ports**
- 4. **Power Button – With Power LED (White)**

Rear Panel



Variant with Sync Module



1. **Display Port (Onboard Graphics)**
2. **HDMI (Onboard Graphics)**
3. **USB 3.2 Gen2 Type A Ports**
4. **LAN RJ45 Port. 1 Gb Network**

LAN port LED Indications

Activity / Link LED		Speed LED		Activity Link LED	Speed LED
Status	Description	Status	Description		
Off	No link	OFF	10Mbps connection	<p>LAN port</p>	
On	Linked	ORANGE	100Mbps connection		
Blinking	Data activity	GREEN	1Gbps connection		

5. **USB 3.2 Gen2 Type A Port**
6. **USB 2.0 Type A Port**
7. **LAN RJ-45 Port. 2.5 Gb Network**

LAN port LED Indications

Activity / Link LED		Speed LED		Activity Link LED	Speed LED
Status	Description	Status	Description		
Off	No link	OFF	10Mbps connection	<p>LAN port</p>	
On	Linked	ORANGE	100/1000Mbps connection		
Blinking	Data activity	GREEN	2.5Gbps connection		

8. **USB 3.2 Gen2x2 Type-C Port.**
9. **USB 3.2 Gen2 Type A Port**

10. Audio Ports.

- a. Line In (Light Blue)
- b. Front Speaker (Lime)
- c. Microphone (Pink)

In order to configure 7.1 Audio, you must utilise the headphone out on the front of the FATBOX.

Audio Ports in 7.1 Channel Configuration	
Port	Function
Light Blue (Rear panel)	Rear Speaker Out
Lime (Rear panel)	Front Speaker Out
Pink (Rear panel)	Central / Subwoofer Speaker Out
Headphones (Front panel)	Side Speaker Out

11. Antenna Ports

12. Display Port 1.4 (x 4)

13. **Power IEC.** Mains Power Input: 100 – 240V~, 10A, 50 – 60Hz (650W)

14. **BNC Genlock Sync.** (Sync Module Variant)

15. **Sync Module Daisey Chain (RJ45 x 2).** (Sync Module Variant)

Note* On board display connections are not available for use.

Internal Expansion

- 1 x M.2 Socket 2280 storage devices support (PCIe x4 Gen4 mode)
- 1 x M.2 Socket 2280 storage devices support (both SATA & PCIe x4 Gen3 mode)
- 2 x 2.5" Drive bays (SATA), Supports RAID 0 & 1

Chassis Specification

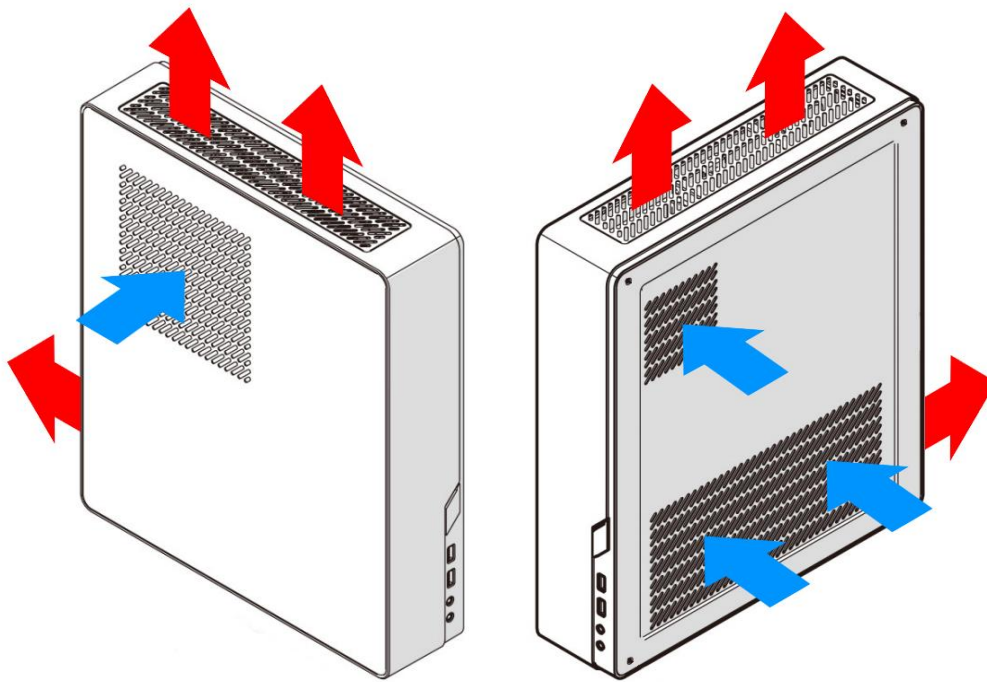
The SlimBOX Chassis also comes with a vertical mount stand.



Colour	Black
Case volume	10.2 litres
Case dimensions (Horizontal) - W x H x D (mm)	377 x 82 x 330
Case dimensions (Horizontal) with feet/protrusions/screws	377 x 88 x 332
Case dimensions (Vertical) with feet/protrusions/screws	125 x 385 x 332
Package dimensions - W x H x D (mm)	145 x 463 x 388

Ventilation

The SlimBOX Chassis has direct ventilation for the processor, power supply and graphics card. In vertical mode the main cool air intakes are all exposed, however when horizontal care should be taken to ensure there is adequate space beneath the unit to allow cool air to flow in. Having the rubber feet attached will allow some air flow, if these are not present then ventilation needs to be added to the bottom contacting surface.



Supported Video Formats

The system comes with Windows installed as standard. Windows includes Windows Media Player by default. As of Windows Media Player 12 the following video formats are supported:

- Windows Media formats (.asf, .wma, .wmv, .wm)
- Windows Media Metafiles (.asx, .wax, .wvx, .wmx)
- Windows Media Metafiles (.wpl)
- Microsoft Digital Video Recording (.dvrms)
- Windows Media Download Package (.wmd)
- Audio Visual Interleave (.avi)
- Moving Pictures Experts Group (.mpg, .mpeg, .m1v, .mp2, .mp3, .mpa, .mpe, .m3u)
- Musical Instrument Digital Interface (.mid, .midi, .rmi)
- Audio Interchange File Format (.aif, .aifc, .aiff)
- Sun Microsystems and NeXT (.au, .snd)
- Audio for Windows (.wav)
- CD Audio Track (.cda)
- Indeo Video Technology (.ivf)
- Windows Media Player Skins (.wmz, .wms)
- QuickTime Movie file (.mov)
- MP4 Audio file (.m4a)
- MP4 Video file (.mp4, .m4v, .mp4v, .3g2, .3gp2, .3gp, .3gpp)
- Windows audio file (.aac, .adt, .adts)
- MPEG2 TS Video file (.m2ts)

**Additional video formats can be supported by the installation of additional software.*