**DVS**

# DVS 2U SPARK4-T1000 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 2U SPARK4-T1000 Pro is a fantastic mid-range performance rack mount server. The dedicated T1000 graphics card delivers good 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. 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" or 3.5" drive bays allow for higher capacity storage and RAID options. The 2U SPARK4-T1000 Pro is excellent for interactives, multi-screen digital signage and entry level media server applications.

## Specifications

- DVS 2U Rackmount Chassis - 457.2 x 430 x 88.1 (mm)  (D x W x H)
- 500 Watt PSU – 100 – 240V~, 7A, 50 – 60Hz
- ATX Motherboard ( Intel Z590 Chipset )
- Intel Processors ( 4, 6, or 8 cores with Hyper Threading )
- 8 / 16 / 32 / 64 GB DDR4 Dual Channel Memory
- nVidia T1000 Graphics Card ( Up to 4 concurrent displays )

DVS 2U SPARK4-T1000 Pro Specification. V 1.0

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- 2 x NVMe M.2 Storage
- 1 x 2.5 Gigabit Network Port
- Operating System - Windows Enterprise IoT LTSC 2019 or Windows 10 Pro
- Optional Extras ( Variants )
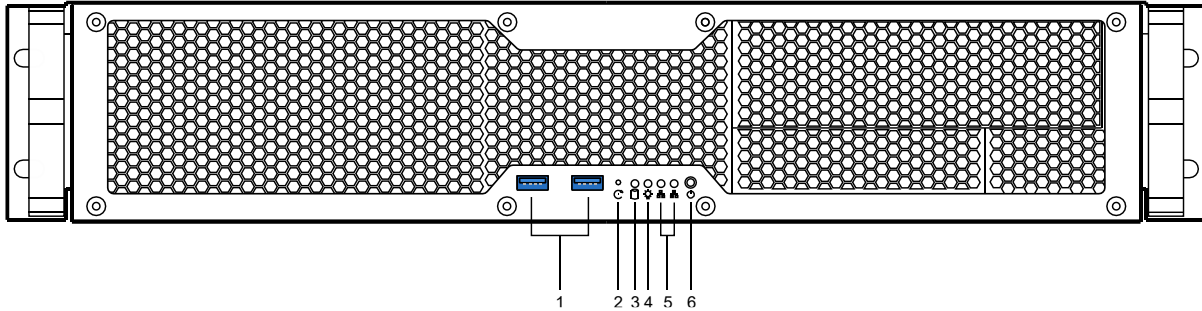  - 2 x SSD or HDD RAID ( RAID 0 or 1 )

## Variations

| Model Number | SSD RAID | HDD RAID |
|---|---|---|
| 4U SPARK4-T1000 Pro | | |
| 4U SPARK4-RH-T1000 Pro | | Yes |
| 4U SPARK4-RS-T1000 Pro | Yes | |

## Graphics Card

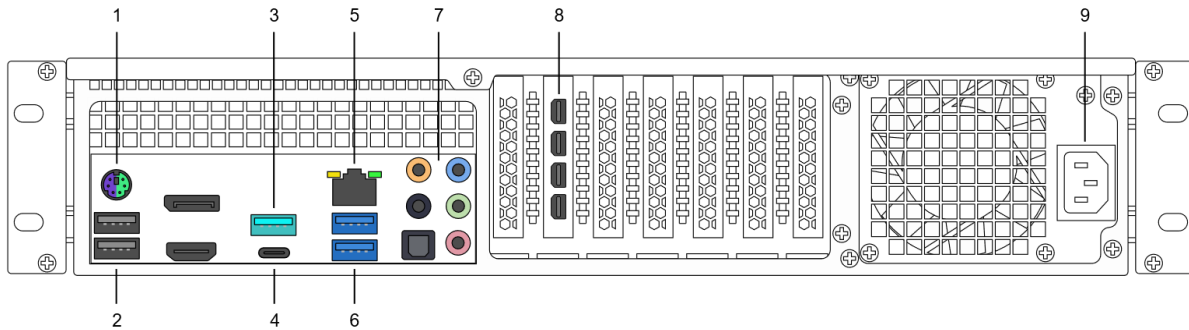| | |
|---|---|
| Chipset | Quadro T1000 |
| Microarchitecture | Turing |
| Memory | 4GB GDDR6 |
| Memory Bus | 128 Bit |
| Interface | PCIe 3.0 (x16) |
| Microsoft DirectX Support | 12 API |
| HDCP Ready | Yes |
| Maximum Concurrent Displays | 4 Displays |
| Maximum Digital Resolution | 7680x4320 @ 60Hz (8K UHD) |
| Outputs | 4 x Mini DisplayPort 1.4 |
| EDID Emulation | Yes |
| Sync Module Supported | No |

# Connectors

## Front Panel

1. **USB 2.0 Ports**
2. **System Reset Switch**
3. **HDD Activity LED**
4. **Power LED**
5. **LAN1 and LAN2 Activity LED.** Not connected
6. **Power Button**

## Rear Panel

1. **PS/2 Keyboard / Mouse Combo Port**
2. **USB 2.0 Ports**
3. **USB 3.2 Gen2 Type-A Port**
4. **USB 3.2 Gen2x2 Type-C Port**
5. **LAN RJ-45 Port.** 2.5 Gigabit Ethernet

## LAN port LED Indications

| Activity / Link LED | | Speed LED | |
|---|---|---|---|
| Status | Description | Status | Description |
| Off | No link | OFF | No Link |
| On | Linked | ORANGE | 10/100/1000 Mbps connection |
| Blinking | Data activity | GREEN | 2.5Gbps connection |

6. **USB 3.2 Gen1 Type-A Ports**.
7. **Audio Ports.** Includes Optical S/PDIF Output

| Audio Ports Channel Configuration | | | | |
|---|---|---|---|---|
| Port | Headset / 2 Channels | 4 Channel | 5.1 Channel | 7.1 Channel |
| Light Blue | Line In | Line In | Line In | Side Speaker Out |
| Lime | Line Out | Front Speaker Out | Front Speaker Out | Front Speaker Out |
| Pink | Mic In | Mic In | Mic In | Mic In |
| Orange | - | - | Centre / Sub Woofer | Centre / Sub Woofer |
| Black | - | Rear Speaker Out | Rear Speaker Out | Rear Speaker Out |

8. **Mini DisplayPort 1.4 ( x 4 )**
9. **Power IEC.** Mains Power Input: 100 – 240V˜, 7A, 50 – 60Hz

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

# Internal Expansion

- M.2 Socket 2242/2260/2280/22110 storage device support (PCIE x4 Gen4)
- M.2 Socket 2242/2260/2280 storage device support (SATA & PCIE x4 Gen3)
- 2 x 2.5" Drive bays ( SATA ), Supports RAID 0 and RAID 1
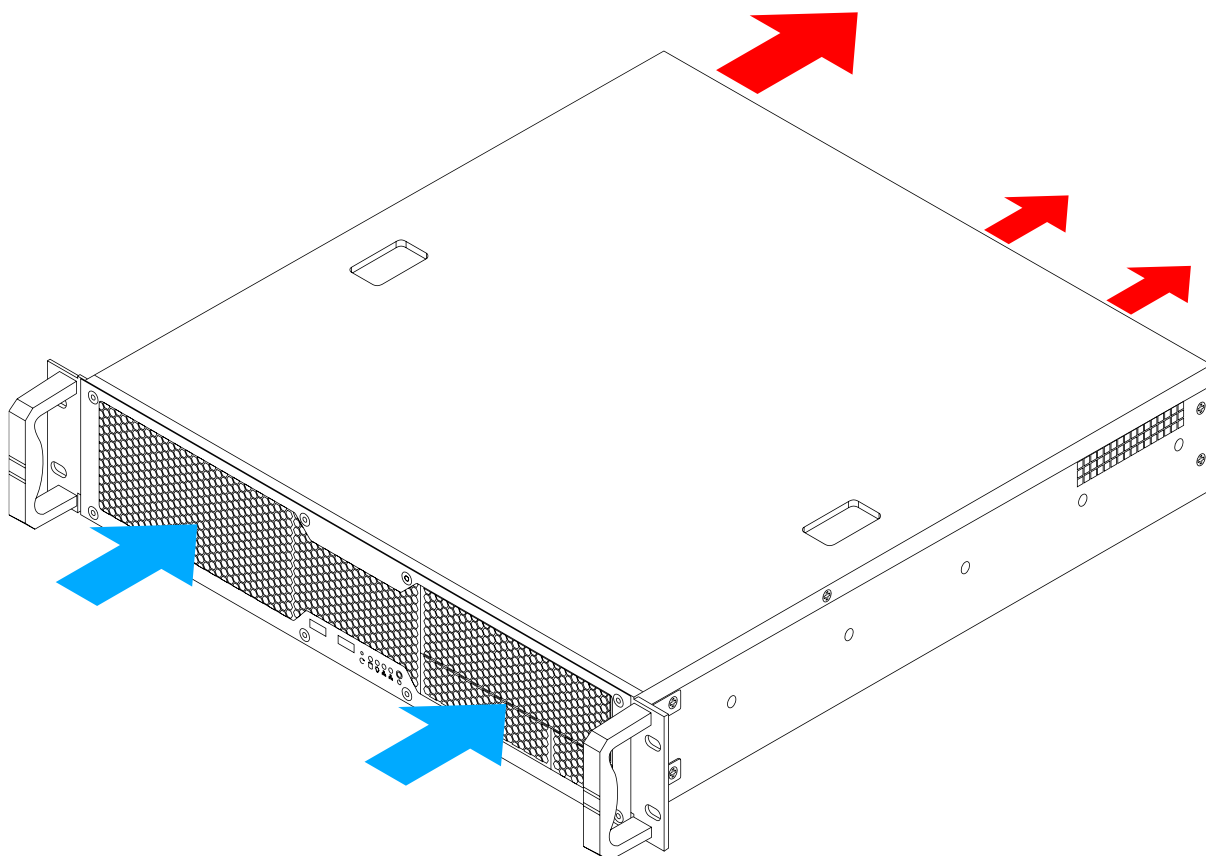- 2 x 3.5" Drive bays ( SATA ), Supports RAID 0 and RAID 1

# Chassis Specification

The DVS 2U SPARK4-T1000 Pro is a two rack unit high chassis, designed to fit in standard 19" rack cabinets. Optional rack rails are available for the system.

| Colour | Silver, Black Front |
|---|---|
| Dimension (D x W x H) | 457.2 x 430 x 88.1 (mm) , 18" x 16.9" x 3.5" |
| Drive Bay | <ul><li>Exposed: 1 x 5.25" + 1 x 3.5"</li><li>Internal: 2 x 3.5", 2 x 2.5"</li></ul> |

# Ventilation

The 2U SPARK4-T1000 Pro is a rack mountable server, all cool air intake is from the front of the chassis and all hot air is actively expelled from the rear of the chassis. The chassis is designed to be in a climate-controlled server room environment.

## 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.*