

# VISIONVS-IP-FIBER(S)

KVM extenders, Article number A1110802



Front



Back

The VisionVS-IP is a hybrid computer module featuring a dual encoder that transmits KVM signals with virtually zero latency and lossless quality via a G&D KVM-over-IP matrix to the workplace. At the same time, it enables remote access to the computer via web interface or low-latency streaming to VuWall PAK devices for flexible video wall management.

## SCOPE OF DELIVERY

Quantity	Description	Article number
1	19" RM-Set-436-1RU	A7000003
1	PowerCable-2 Standard cable 2m	A6300057
1	USB-AM/BM-2 cable USB 2m	A6300113
1	DP1.4-Cable-M/M-2 SK13357 2m	A6300173
1	RS232-M/F-2 cable RS232 2m	A6300023
1	Audio-M/M-2-ferrite cable 2m	A6300083
1	Safety instructions flyer - FCC class A	A9100377

## FEATURES

### VIDEO

- bluedec™ – advanced developed multi-stage compression for best video quality and practically latency-free transmission. This method enables pixel-perfect video transmission with efficient bandwidth use.
- The KVM-over-IP end devices can be flexibly combined with each other, even if they process different video signals (Mix & Match)
- Resolution up to  
2560 × 1600 @ 60 Hz,  
4096 × 2160 @ 30 Hz
- Resolution up to  
2560 × 1600 @ 60 Hz,  
4096 × 2160 @ 30 Hz

### SIGNALS

- Embedded stereo audio (2 channel LPCM)

### TRANSMISSION

- At least one Layer-2-managed switch with Gigabit Ethernet is required, offering features such as QoS and VLAN. Additionally, adequate performance (forwarding bandwidth, switching bandwidth, forwarding performance, and uplinks) must be ensured, especially when using multiple network switches
- KVM-over-IP™ over IP-based networks (layer 3)
- The transmission distance between two active network components is up to 10,000 meters over fiber singlemode optics, incl. transmission module(s)/SFP transceiver(s)

### DEVICE

- Improved security through physical separation between workplaces and computers
- Access to standard interfaces of the computer, with no software installation required
- The devices are compatible with the ControlCenter-IP and ControlCenter-IP-XS series (matrix operation) and other KVM-over-IP end devices for computer and workplace connections (extender operation)
- Internal power pack for main power supply

### SECURITY FEATURES

- Permanent encryption of all communication and data transmissions, as well as sensitive information such as login credentials and passwords, guarantees a high level of security in critical environments
  - AES256-GCM for keyboard/mouse and control data
  - AES128-CTR for video, audio, GenericUSB and RS232

## FEATURES

### OPERATION FEATURES

- Video wall processing and KVM combined in one appliance  
The combination of powerful image processing and KVM functionality reduces the number of required devices.
- Direct streaming to G&D KVM matrix systems and VuWall PAK nodes  
Flexible use in hybrid environments with both centralized and decentralized access to computing resources.
- Reduced system complexity, lower cabling effort, and minimal rack space requirements  
A more efficient infrastructure with fewer hardware components saves costs, conserves space, and simplifies installation.

## EXTENSIONS

### TRANSMISSION

- A VuWall TRx appliance with version 3.11 or higher is required for the VuWall streaming application.

### DEVICE

- External power supply via external 12V power pack or G&D-MultiPower, providing a central and redundant power supply

### SYSTEM EXTENSION

- You can integrate the matrix-compatible KVM-over-IP extenders into a complete installation with a ControlCenter-IP or ControlCenter-IP-XS, even at a later point in time. This provides you with even greater flexibility through the possibility of distributed access – and the existing components can continue to be used.

## INTERFACES

### FRONT



Aperture designation	Design	Description
Network Management	RJ45 socket	Port for IP network
Service	Mini-USB socket	Port for service purposes

### BACK



Aperture designation	Design	Description
HDMI Out	HDMI socket	Port for monitor
USB K/M	USB-A socket 2.0	Port for keyboard and mouse
Control	Clamp block - 5 pins	Port for external remote control
Network	RJ45 socket	Port for IP network
Transmission	SC-Duplex socket	Data transmission to console module or matrix switch over IP network (FIBER)
DisplayPort CPU	DisplayPort socket	Connection to computer - Video
Red. Power 12VDC	Mini-DIN 4 socket	Power supply DC redundant
Main Power	IEC plug 320 C14	Power supply AC

## TECHNICAL DATA

General	Product group	KVM extenders
	Product Family	VisionVS-IP
	KVM matrix system component	Computer module (digital)
	Power Supply	Redundancy without load balancing
Input options	USB mouse	yes
	USB keyboard	yes
Transmission	Number of transmission channels	1
	Redundant transmission channels	no redundant KVM transmission
	Range	10,000 m (9/125µm, OS1)
	Laser class	Class 1
	Type of interface	LC-Duplex
	Wavelength	1,310 nm
	Medium	Fiber SM
	Data rate	1 Gbit/s
Video input	Quantity	1
	Format	DisplayPort 1.1 (HBR)
	Colour depth	24 bit
	Pixel rate ca.	25 MPixel/s to 300 MPixel/s
	Vertical frequency	24 Hz to 120 Hz

	Horizontal frequency	25 kHz to 185 kHz
	Exemplary resolutions	4096 × 2160 (30 Hz) 4096 × 2160 (25 Hz) 4096 × 2160 (24 Hz) 3840 × 2160 (30 Hz) 3840 × 2160 (25 Hz) 3840 × 2160 (24 Hz) 2560 × 1600 (60 Hz) 2048 × 2048 (60 Hz) 1920 × 1200 (60 Hz) 1920 × 1080 (60 Hz)
	General Notes	Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
	Supported industry standards	Display Data Channel Command Interface (DDC/CI) Extended Display Identification Data (EDID)
Video output	Quantity	1
	Format	HDMI 1.4
	Colour depth	24 bit
	Pixel rate ca.	25 MPixel/s to 297 MPixel/s
	Exemplary resolutions	4096 × 2160 (24 Hz) 4096 × 2160 (25 Hz) 4096 × 2160 (30 Hz) 3840 × 2160 (24 Hz) 3840 × 2160 (25 Hz) 3840 × 2160 (30 Hz) 2048 × 2160 (60 Hz) 2048 × 2048 (60 Hz) 2560 × 1600 (60 Hz) 1920 × 1200 (60 Hz) 1920 × 1080 (60 Hz)

	General Notes	Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
Audio	Transmission type	Stereo 2-channel LPCM
	Resolutions	16 bit
	Sampling rate	up to 48 kHz
	Audio support	Digital Embedded
Network 1	Quantity	1
	Medium	CAT5 CAT6 CAT7
	Data rate	10 Mbit/s 100 Mbit/s
Network 2	Quantity	1
	Medium	CAT5 CAT6 CAT7
	Data rate	1 Gbit/s 100 Mbit/s 10 Mbit/s
Maintenance	Update via	WebIF (Network)
Housing	Material	Anodised aluminium
	Width ca.	436 mm
	Height ca.	44 mm
	Depth ca.	284 mm

	IP protection class	IP20
Operating conditions	Operating air humidity, non-condensing	20 % to 80 %
	Area of application	Indoor use
	Maximum operating altitude above sea level	3,048 m
	Storage environment temperature	-20 °C to 60 °C
	Storage air humidity, non-condensing	15 % to 85 %
Power supply 1	Quantity	1
	Type	Internal
	Input voltage	100-240 VAC
	Input frequency	60-50 Hz
	Current consumption	0.4-0.2 A
Power supply 2	Quantity	1
	Type	External
	Input voltage	12 VDC
	Current consumption	1.65 A

## ACCESSORY PRODUCTS

Image	Description	Article number
	<b>USB-Service-2 cable 2m</b> Cable for system updates and configuration	A6200103
	<b>Audio-M/M-3-ferrite cable 3m</b> Audio connection cable with ferrite core	A6300118
	<b>Audio-M/M-5-ferrite cable 5m</b> Audio connection cable with ferrite core	A6300085
	<b>DP-Cable-M/M-3 cable DP 3m</b> Single cable to connect a DisplayPort video channel	A6300109
	<b>DP1.4-Cable-M/M-3 SK13358 3m</b> Single cable to connect a DisplayPort video channel (DP1.4)	A6300174
	<b>DP1.4-Cable-M/M-5 SK13359 5m</b> Single cable to connect a DisplayPort video channel (DP1.4)	A6300175
	<b>PowerCable-3 Standard cable 3m</b> Cable to connect the power supply type Germany	A6300066
	<b>PowerCable-5 Standard cable 5m</b> Cable to connect the power supply type Germany	A6300065
	<b>RS232-M/F-5 cable RS232 5m</b> Cable to connect a serial device	A6300025
	<b>USB-AM/BM-3 cable USB 3m</b> USB cable, Type-A Plug/Type-B Plug	A6300114
	<b>USB-AM/BM-5 cable USB 5m</b> USB cable, Type-A Plug/Type-B Plug	A6300111

## RELATED PRODUCTS

Description	Article number
<b>TS-LED-blue-R-2</b> LED to tag the active console of a TradeSwitch configuration of a matrix	A6100173
<b>TS-LED-blue-R-3</b> LED to tag the active console of a TradeSwitch configuration of a matrix	A6100172
<b>TS-LED-blue-R-5</b> LED to tag the active console of a TradeSwitch configuration of a matrix	A6100171

## MORE VARIANTS

Description	Article number
<b>VisionVS-IP-CAT</b> Hybrid computer module to extend DisplayPort signals with G&D KVM-over-IP matrix (CAT) and simultaneous streaming (CAT)	A1110800
<b>VisionVS-IP-Fiber(M)</b> Hybrid computer module to extend DisplayPort signals with G&D KVM-over-IP matrix (fiber) and simultaneous streaming (CAT)	A1110801

# CONTACT

## WE ARE HERE FOR YOU!

If you have any further questions, we are looking forward to advising you on your individual project requirements.

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