# VISIONVS-IP-FIBER(M)

KVM extenders, Article number A1110801



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 550 meters over fiber multimode 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

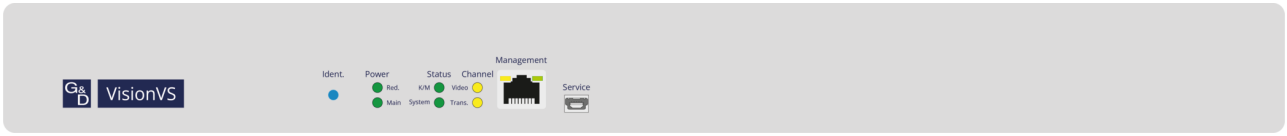
- External power supply via external 12V power pack or G&D-MultiPower, providing a central and redundant power supply

## 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.

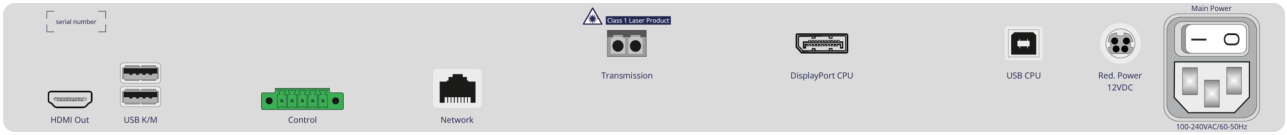
# INTERFACES

## 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 | Brand | G&D |
| | Product group | KVM extenders |
| | Product Family | VisionVS-IP |
| | Country of origin | Germany |
| | 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 | 550 m (50.0/125µm, OM2 - 500MHz*km)<br>500 m (50.0/125µm, OM2 - 400MHz*km)<br>220 m (62.5/125µm, OM1 - 160MHz*km)<br>275 m (62.5/125µm, OM1 - 200MHz*km) |
| | Laser class | Class 1 |
| | Type of interface | LC-Duplex |
| | Wavelength | 850 nm |
| | Medium | Fiber MM |
| | Data rate | 1 Gbit/s |

| | | |
|---|---|---|
| **Video input** | Quantity | 1 |
| | Format | DisplayPort 1.1 (HBR) |
| | Colour depth | 24 bit |
| | Pixel encoding | RGB 4:4:4 (24 bpp / 8 bpc) |
| | 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)<br>4096 × 2160 (25 Hz)<br>4096 × 2160 (24 Hz)<br>3840 × 2160 (30 Hz)<br>3840 × 2160 (25 Hz)<br>3840 × 2160 (24 Hz)<br>2560 × 1600 (60 Hz)<br>2048 × 2048 (60 Hz)<br>1920 × 1200 (60 Hz)<br>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)<br>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)<br>4096 × 2160 (25 Hz)<br>4096 × 2160 (30 Hz)<br>3840 × 2160 (24 Hz)<br>3840 × 2160 (25 Hz)<br>3840 × 2160 (30 Hz)<br>2048 × 2160 (60 Hz)<br>2048 × 2048 (60 Hz)<br>2560 × 1600 (60 Hz)<br>1920 × 1200 (60 Hz)<br>1920 × 1080 (60 Hz) |
| | General Notes | Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency. |
| Audio | Transmission type | Stereo<br>2-channel LPCM |
| | Resolutions | 16 bit |
| | Sampling rate | up to 48 kHz |
| | Audio support | Digital Embedded |
| Network 1 | Quantity | 1 |
| | Medium | CAT5<br>CAT6<br>CAT7 |
| | Data rate | 10 Mbit/s<br>100 Mbit/s |
| Network 2 | Quantity | 1 |
| | Medium | CAT5<br>CAT6<br>CAT7 |
| | Data rate | 1 Gbit/s<br>100 Mbit/s<br>10 Mbit/s |

| | | |
|---|---|---|
| Maintenance | Update via | WebIF (Network) |
| Housing | Material | Anodised aluminium |
| | Active cooling (fan) | no |
| | 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 |
|---|---|---|
| | **USB-Service-2 cable 2m**<br>Cable for system updates and configuration | A6200103 |
| | **Audio-M/M-3-ferrite cable 3m**<br>Audio connection cable with ferrite core | A6300118 |
| | **Audio-M/M-5-ferrite cable 5m**<br>Audio connection cable with ferrite core | A6300085 |
| | **DP-Cable-M/M-3 cable DP 3m**<br>Single cable to connect a DisplayPort video channel | A6300109 |
| | **DP1.4-Cable-M/M-3 SK13358 3m**<br>Single cable to connect a DisplayPort video channel (DP1.4) | A6300174 |
| | **DP1.4-Cable-M/M-5 SK13359 5m**<br>Single cable to connect a DisplayPort video channel (DP1.4) | A6300175 |
| | **PowerCable-3 Standard cable 3m**<br>Cable to connect the power supply type Germany | A6300066 |
| | **PowerCable-5 Standard cable 5m**<br>Cable to connect the power supply type Germany | A6300065 |
| | **RS232-M/F-5 cable RS232 5m**<br>Cable to connect a serial device | A6300025 |
| | **USB-AM/BM-3 cable USB 3m**<br>USB cable, Type-A Plug/Type-B Plug | A6300114 |
| | **USB-AM/BM-5 cable USB 5m**<br>USB cable, Type-A Plug/Type-B Plug | A6300111 |

## RELATED PRODUCTS

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

## MORE VARIANTS

| Description | Article number |
|---|---|
| **VisionVS-IP-CAT**<br>Hybrid computer module to extend DisplayPort signals with G&D KVM-over-IP matrix (CAT) and simultaneous streaming (CAT) | A1110800 |
| **VisionVS-IP-Fiber(S)**<br>Hybrid computer module to extend DisplayPort signals with G&D KVM-over-IP matrix (fiber) and simultaneous streaming (CAT) | A1110802 |

# CONTACT

## WE ARE HERE FOR YOU!

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


### TECHNICAL SALES

Tel.: +49 271 23872-333
Fax: +49 271 23872-120
E-Mail: sales@panoptec.com

### HEADQUARTERS

Panoptec Europe GmbH
Obere Leimbach 9 | 57074 Siegen | NRW | Deutschland

Tel.: +49 271 23872-0
Fax: +49 271 23872-120
E-Mail: sales@panoptec.com

### US OFFICE

G&D North America Inc.
4540 Kendrick Plaza Drive | Suite 100
Houston, TX 77032 | United States

Tel.: +1-346-620-4362
E-Mail: sales.us@gdsys.com

### MIDDLE EAST OFFICE

Panoptec Europe GmbH
Dubai Studio City | DSC Tower
12th Floor, Office 1208 | Dubai, UAE

Tel.: +971 4 5586178
E-Mail: sales@panoptec.com

### APAC OFFICE

Panoptec Europe GmbH
60 Anson Road #17-01
Singapore 079914

Tel.: +65 9685 8807
E-Mail: sales@panoptec.com