# DP1.2-VISIONXG-FIBER(M)-MC2-AR-CPU

KVM extenders, Article number A1210200



Front



Back

The KVM extenders of the DP1.2-VisionXG series extend keyboard, video, and mouse signals, as well as other peripheral data (e.g., audio and USB), via a dedicated CAT or fiber connection (up to 10,000 m) uncompressed, pixel-perfect and without any latency or loss. An extender system consists of a computer module (CPU) and a compatible console module (CON). The VisionXS-DP-UHR series supports DisplayPort1.2 for ultra-high-resolution video up to 4096 × 2160 (60 Hz) or 5120 × 2160 (50 Hz).

## SCOPE OF DELIVERY

| Quantity | Description | Article number |
|---|---|---|
| 2 | PowerCable-2 Standard cable 2m | A6300057 |
| 1 | USB-AM/BM-2 cable USB 2m | A6300113 |
| 2 | DP1.4-Cable-M/M-2 SK13357 2m | A6300173 |
| 1 | RS232-M/F-2 cable RS232 2m | A6300023 |
| 2 | Audio-M/M-2-ferrite cable 2m | A6300083 |
| 1 | 19" RM-Set-436-1RU | A7000003 |
| 1 | Safety instructions flyer - FCC class B | A9100371 |

# DETAILS

## VIDEO

- EDID data utilization from the workplace monitor
- Flexible EDID profile options for optimized monitor settings
- Native 4K resolution at 60 Hz
- Uncompressed, lossless transmission in 1:1 performance, pixel perfect, latency free (zero delay) transmission, no frame drops, no tearing with a perfect hand eye coordination

## SIGNALS

- Embedded stereo audio (Digital, 2 channel LPCM)
- Transparent audio signals (stereo, analog)
- Transparent RS232 (max. 230,400 bps)

## TRANSMISSION

- The transmission distance is up to 400 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
- Ventilation concept for use in cold/warm aisle installations
- MultiChannel variants (MC): Modules for multi-monitor workplaces with multi-channel video
  - MC mode uses the full bandwidth for each video channel, whereby a separate transmission line is required for each channel

## WARRANTY

- A 3-year, free of charge product guarantee
- For an additional fee guarantee extension possible

# FEATURES

## VIDEO

- Efficient image data compression (fall-back compression) can be activated for emergency operation (for example, if single transmission lines fail, the bandwidth may be reduced in a way that uncompressed transmission can no longer be ensured)

## SECURITY FEATURES

- Console modules do not store security-relevant information such as login credentials, which could be extracted in the event of device loss
- Monitoring of system states such as status, power supply, temperature and computer modules and console modules are monitored as well
- Each monitoring value can be enabled individually; critical states raise an alarm, which authorized users can acknowledge to downgrade it to warning level
- Syslog logging locally and to up to two servers, via TCP or UDP, with configurable port, eight severity levels per the syslog standard and ISO 8601 timestamps
- Logged events include user logins, failed login attempts, changes to user rights, connections to remote targets and failed backups
- SNMP agent supporting SNMPv2c and SNMPv3; for SNMPv3, authentication via SHA-1 through SHA-512, encryption with AES128, AES192 or AES256, and security levels up to authPriv
- Access to the SNMP agent can be restricted to defined source IP addresses or network segments (IPv4 and IPv6)
- SNMP notifications to multiple receivers, sent either as traps or as acknowledged informs, with a configurable severity threshold
- Comprehensive rights management and user administration, allowing precise control over which user can access which resources
- Option for activatable access protection (default operating mode in matrix systems), in which authentication is required before accessing computer sources
- Support for external directory services (Active Directory, Radius, LDAP) to meet company security policies
- Freeze function: If the video signal is lost, the last displayed image is frozen and highlighted with a colored frame and timer
- Redundant internal power packs
- Redundant network interface

## OPERATION FEATURES

- Ready for operation out of the box, no additional configuration required
- Permanent keyboard/mouse emulation ensures a stable system

- Compatibility with special USB-HID input devices
- Operation via multilingual on-screen display (OSD) and hotkeys
- Configuration and update via the multilingual HTML5 web interface “Config Panel 21” (Java-free)
- Support of DDC/CI (Display Data Channel / Command Interface) to enable centralized software-side control of monitor settings such as brightness
- Local console at the computer module allows on-site operation, including all video channels
- Exclusive or concurrent operation: The KVM extender allows computer control both remotely and locally. When an input is detected, the extender automatically locks the competing console. The lock is lifted after a preset timeout if no further input is detected. A key combination can activate exclusive operation, immediately disabling the competing console. Another key combination restores shared control.

# TECHNICAL DATA

| | | |
|---|---|---|
| General | Brand | G&D |
| | Product group | KVM extenders |
| | Product Family | DP1.2-VisionXG |
| | Country of origin | Germany |
| | Power Supply | Redundancy without load balancing |
| Input options | USB mouse | yes |
| | USB keyboard | yes |
| | PS/2 keyboard | yes |
| Transmission | Number of transmission channels | 4 |
| | Redundant transmission channels | no redundant KVM transmission |
| | Range | 400 m (50.0/125µm, OM4 - 4700MHz*km)<br>300 m (50.0/125µm, OM3 - 2000MHz*km)<br>82 m (50.0/125µm, OM2 - 500MHz*km)<br>66 m (50.0/125µm)<br>33 m (62.5/125µm, OM1 - 200MHz*km)<br>26 m (62.5/125µm) |
| | Laser class | Class 1 |
| | Type of interface | LC-Duplex |
| | Wavelength | 850 nm |
| | Medium | Fiber MM |

| | | |
|---|---|---|
| | Data rate | 10 Gbit/s |
| Video input | Quantity | 2 |
| | Format | DisplayPort 1.2 (LBR, HBR, HBR2, SingleStream-Transport (SST)) |
| | Colour depth | 24 bit |
| | Pixel encoding | RGB 4:4:4 (24 bpp / 8 bpc) |
| | Pixel rate ca. | 0 MPixel/s to 600 MPixel/s |
| | Vertical frequency | 24 Hz to 240 Hz |
| | Horizontal frequency | 25 kHz to 295 kHz |
| | Exemplary resolutions | 4096 × 2160 (60 Hz)<br>3840 × 2160 (60 Hz)<br>2560 × 1600 (60 Hz)<br>2560 × 1440 (144 Hz)<br>2048 × 2048 (60 Hz)<br>1920 × 1200 (60 Hz)<br>1920 × 1080 (240 Hz)<br>1920 × 1080 (60 Hz)<br>5120 × 1440 (60 Hz)<br>5120 × 2160 (50 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) |
| Video output | Quantity | 2 |
| | Format | DisplayPort 1.2 (LBR, HBR, HBR2, SingleStream-Transport (SST)) |
| | Colour depth | 24 bit |

| | | |
|---|---|---|
| | Pixel encoding | RGB 4:4:4 (24 bpp / 8 bpc) |
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| | 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) |
| Audio 1 | Transmission type | Stereo<br>2-channel LPCM |
| | Resolutions | 24 bit<br>20 bit<br>16 bit |
| | Sampling rate | up to 48 kHz |
| | Audio support | Digital Embedded |
| Audio 2 | Transmission type | Stereo<br>Transparent |
| | Resolutions | 24 bit digital |

| | | |
|---|---|---|
| | Sampling rate | up to 96 kHz |
| | Bandwidth | 22 kHz |
| | Audio support | Analog |
| Serial | Standard | RS232 |
| | Transparent transmission | yes |
| | Data rate | max. 230,400 bps |
| | Signals | TxD<br>RxD<br>DTR<br>DSR<br>RTS<br>CTS<br>DCD |
| Network | Quantity | 2 |
| | Medium | CAT5<br>CAT6<br>CAT7 |
| | Data rate | 10 Mbit/s<br>100 Mbit/s<br>1 Gbit/s |
| Maintenance | Update via | ConfigPanel (Network) |
| | Serviceport settings | 115200bps (8/N/1) |
| Housing | Material | Anodised aluminium |
| | Active cooling (fan) | yes |
| | Width ca. | 436 mm / 17.17 in |
| | Height ca. | 44 mm / 1.73 in |

| | | |
|---|---|---|
| | Depth ca. | 210 mm / 8.27 in |
| | IP protection class | IP20 |
| | Weight ca. | 2.64 kg / 5.82 lb |
| Operating conditions | Operating environment temperature | 5 °C to 45 °C / 41 °F to 113 °F |
| | Operating air humidity, non-condensing | 20 % to 80 % |
| | Area of application | Indoor use |
| | Maximum operating altitude above sea level | 3,000 m |
| | Storage environment temperature | -20 °C to 60 °C / -4 °F to 140 °F |
| | Storage air humidity, non-condensing | 15 % to 80 % |
| | MTBF | 146,000 h at 25°C (77 °F) |
| | Note | Special Fiber variants for CWDM (Coarse Wavelength Division Multiplexing) are expected to allow a lower maximum temperature, but at least +5°c to at least +35°C. |
| | Conformities | UKCA compliant (see downloads)<br>UL compliant (see downloads)<br>CB compliant (see downloads)<br>FCC compliant (see manual)<br>TAA compliant (see downloads)<br>RoHS compliant (see downloads)<br>WEEE (reg. no. DE30763240)<br>REACH compliant (see downloads)<br>CE compliant (see downloads) |
| Power supply | Quantity | 2 |
| | Type | Internal |

| | |
|---|---|
| Input voltage | 100-240 VAC |
| Input frequency | 60-50 Hz |
| Current consumption | 0.9-0.5 A |
| Power consumption max. | 41.2 W |
| Heat output max. | 39.2 W / 133.76 BTU/h |

## ACCESSORY PRODUCTS

| Image | Description | Article number |
|---|---|---|
| | **USB-Service-2 cable 2m**<br>Cable for system updates and configuration | A6200103 |
| | **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 |
| | **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 |
| | **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 |
| | **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 |

## MORE VARIANTS

| Description | Article number |
|---|---|
| **DP1.2-VisionXG-Fiber(M)-AR-CPU**<br>Computer module to extend uncompressed DisplayPort signals via fiber multimode | A1110195 |
| **DP1.2-VisionXG-Fiber(M)-ARU2-CPU**<br>Computer module to extend uncompressed DisplayPort signals via fiber multimode | A1110196 |
| **DP1.2-VisionXG-Fiber(M)-MC2-ARU2-CPU**<br>Computer module to extend uncompressed DisplayPort signals via fiber multimode | A1210201 |

# 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.: +1-833-928-1976
Fax: +1-833-928-1976
E-Mail: sales.us@gdsys.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