



DP-Vision

DP KVM extenders v 1.0

KVM extenders

Extender systems to bridge IT-distances



G&D IF IT'S KVM



The company

Experience the whole world of

KVM

G&D IF IT'S KVM

Guntermann & Drunck is regarded as a leading manufacturer of digital and analogue KVM equipment used in control rooms in air traffic control, broadcast studios, on ships and to monitor industrial processes.

With a powerful portfolio consisting of KVM extenders, switches and matrix switches, G&D's users get real added value. G&D provides the broadest KVM product portfolio at the market. Even with different features, all G&D products are compatible and can be combined. Our KVM solutions optimise the application of IT equipment and improve the working conditions for humans and computers.

No matter where KVM devices are installed, there's always one main requirement - robust, reliable, user-friendly and easy to operate KVM systems that can be adapted to future requirements and grow with your demands.

By short lines of communication G&D is able to solve challenging requirements and tailor systems to our customers' needs. We keep direct contact to our customers and are personally available. We are proactive and always keep an eye on the trends in the industry. Functionalities required by our customers are quickly implemented into our products. Our success can only be measured with our customers' satisfaction.

Trust in G&D for your optimal KVM solution.

DP-Vision - transmission of DisplayPort™ signals via CAT or fibre optics

The DP-Vision transmits the following signals:

- DisplayPort™ 1.1
- bidirectional audio and RS232
- PS/2 and USB keyboard/mouse support
- Integrated USB 2.0 (ARU variant)
- Transparent transmission of USB 2.0 (ARU2 variant)
- Generic USB-HID interface

The system consists of a computer module (transmitter) and a user module (receiver) and enables you to operate a computer on a local or remote console.

DP-Vision uses CAT-x cables or fibre optics to transmit signals up to 10,000 m. The devices use DisplayPort video and are available as variants displaying 1, 2, 3 or 4 video channels. It is also possible to transmit transparent USB 2.0, RS232 and audio signals.

With its network port, the web interface and monitoring functions, the DP-Vision system offers important features for mission-critical applications.



DP-Vision - back view

DP-Vision - front view

Highlights

Video

- Highly developed compression algorithm of the latest generation for best video quality and latency-free transmission - The High-Dynamic-Image-Processing level 3
- DisplayPort 1.1a signals
- Resolutions per channel up to 2560 × 1600 @ 60 Hz (more VESA and CEA standardized resolutions within the video bandwidth and the horizontal / vertical frequency are possible, e.g. 1600 x 1200 @ 60 Hz)
- Hz to 120 Hz
- 24 bit colour mode
- Transparent forwarding of E-DDC information
- Single- and multi-channel variants

Signals

- Transmission of bidirectional audio and RS232
- PS/2 and USB keyboard/mouse support
- Integrated USB 2.0 transmission with Full Speed (ARU variant)
- Transparent transmission of USB 2.0 with Hi-Speed 480 MBit/s (ARU2 variant)
- Generic USB-HID interface for connecting any HID device, e.g. touchscreens or tablets

Operation

- At both modules console with all video channels
- via Web-Interface or OSD
- Competing or exclusive operation via local or remote workplace

Transmission

- Distances up to 140 meters at maximum resolution over CAT-x cable (x = 5e, 6, 7; depending on cable)
- Distances up to 400 metres at maximum resolution with multimode fiber optics
- Distances up to 5,000 (S) or 10,000 m (S+) metres at maximum resolution with singlemode fiber optics

Device

- Supports PS/2 and USB keyboard/mouse; allows mixed operation
- Permanent keyboard/mouse emulation
- Redundant, external power supply (optional)
- Ident LED helps finding the device in complex installations
- Shipped as desktop variant (Twin devices and sets for rack- or tablemounting are separately available)

System update

- Over the config panel

Features

Screen-Freeze Function

If the console module loses the video signal due to a broken connection or a problem with the computer's graphics card, the Screen-Freeze function „freezes“ the last displayed image of the monitor. This state is highlighted by a red semi-transparent frame. The function is automatically cancelled when the display receives an active video signal.

Easier access with SNMP tool Zabbix

For customers who are not yet using extensive SNMP tools, G&D offer a simple way to use the functions included in the devices. Templates for the open source tool Zabbix are provided here. The program lets users monitor SNMP-capable devices in a network and, among other things, issues warning notifications about critical device states, which have been received via SNMP trap.

Monitoring

With the Monitoring function, you can auto-output device status messages to Syslog servers or SNMP. The web interface lets you monitor the device manually.

The Monitoring function of the DP-Vision queries the following values:

- Proactive monitoring of device states
- Event reporting function (Syslog or SNMP traps)
- Status power supply unit (on/off)
- Status temperature threshold device (in/over limit)
- Status connection cables (ok/nok)
- Status computer (on/off)
- Status image signal graphics card computer (available/not available)
- Status network
- Fan monitoring
- Status SFP modules (in -Fiber variants)
- Status interfaces (CPU and CON modules)
- Freeze status (all channels)
- Type of display (local and remote)

Variants

Transmission medium

- **DP-Vision-CAT variants:** transmission via CAT-x cables
- **DP-Vision-Fiber variants:** transmission via multimode or singlemode fiber optics

Video channels

- Single-channel
- Multi-channel 2, 3 or 4

USB transmission

- **„U“ variants:** integrated USB 2.0 transmission without an additional transmission cable. This variant offers transfer speed up to 16 Mbit/s.
- **„U2“ variants:** USB 2.0 transmission with an additional cable. This solution reaches the HiSpeed transfer rate of 480 Mbit/s.

Expansion

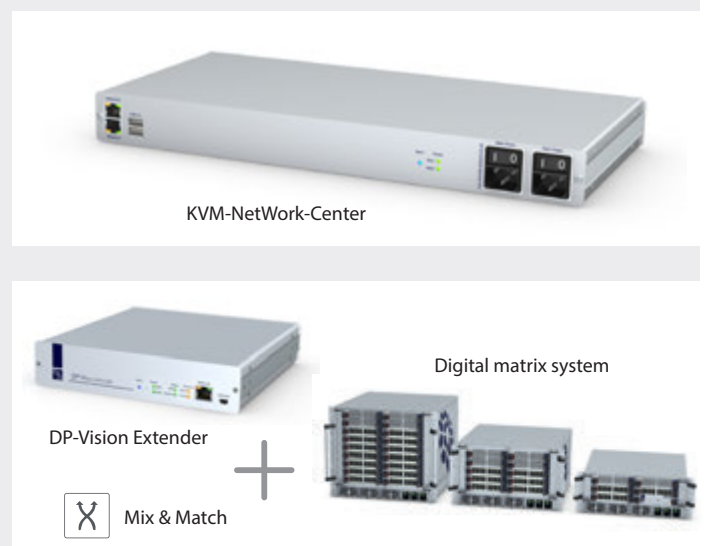
Communication with KVM-NetworkCenter

DP-Vision uses the network to communicate with the appliance KVM-NetworkCenter. When deploying more than one DP-Vision, you can query and configure the devices by using the KVM-NetworkCenter.

Embedding extenders in digital matrix systems

To be prepared for growing installations, the integrated matrix support turns the DP1.2-Vision into a future-proof investment.

This way, it is possible to include extenders at a later point into one of the digital G&D matrix systems within an existing installation. Thus, users benefit from more flexibility through distributed access - and any existing components can still be used as before.



Installation

Link the computer to the back of the DP-Vision transmitter. Distinctive cables connect the computer's keyboard, video, mouse, audio, RS232, and USB interfaces to the DP-Vision computer module.

Installing the user console is just as easy: simply connect the operating hardware with the corresponding interfaces of the DP-Vision receiver.

Use the existing cabling structure to link transmitter and receiver.

DP-Vision-CAT



DP-Vision-CAT-ARU computer module



DP-Vision-CAT-ARU computer module

General features of the series DP-Vision-CAT

| Technical data | |
|--------------------------------------|---|
| Interfaces for computers | |
| Video | --> see specific features |
| PS/2 keyboard/mouse: | 2 × PS/2 socket |
| USB keyboard/mouse: | 1 × USB-B socket |
| Audio | 3.5-mm jack plug (Line In) 3.5-mm jack plug (Line Out) |
| USB 2.0 variant -ARU | Shared transmission of signals of USB devices as well as keyboard and mouse via USB-B socket. |
| USB 2.0 variant -ARU2 | 1 × USB-B socket |
| RS232 | 1 × RS232 socket |
| Interfaces for remote console | |
| Monitor: | --> see specific features |
| PS/2 keyboard/mouse: | 2 × PS/2 socket |
| USB keyboard/mouse: | 2 × USB-A socket |
| Generic-HID | 1 × USB-A socket |
| Audio | 3.5-mm jack plug (Speaker) 3.5-mm jack plug (Micro In) |
| USB 2.0 variant -ARU | 2 × USB-A socket |
| USB 2.0 variant -ARU2 | 2 × USB-A socket (front panel) 2 × USB-A socket (back panel) |
| RS232 | 1 × RS232 plug |
| Interfaces for local console | |
| Monitor: | --> see specific features |
| PS/2 keyboard: | 1 × PS/2 socket |
| USB keyboard/mouse: | 2 × USB-A socket |
| Other interfaces | |
| Connection to network: | 1 × RJ 45 socket |
| Service: | 1 × Mini-USB socket (type B) |
| Audio | |
| Transmission type: | transparent, bidirectional |
| Resolution: | 24 bit digital, Stereo |
| Sampling rate: | 96 kHz |
| Bandwidth: | 22 kHz |

General features of the series DP-Vision-CAT

| Technical data | |
|---|---|
| RS232 | |
| Transmission type: | transparent |
| Transmission rate: | max. 115.200 bit/s |
| Supported signals: | RxD, TxD, RTS, CTS, DTR, DSR, DCD |
| Graphics | |
| Format: | DisplayPort (DP 1.1a) |
| Colour depth: | 24 Bit |
| Video bandwidth: | 25 to 300 MP / s, DisplayPort 4 Lanes, HBR 2.7 Gbps |
| Max. resolution: | 2560 × 1600 (60 Hz) 4096 × 2160 (30 Hz) |
| Exemplary resolutions: | 4096 × 2160 (24 od 25 Hz) 3840 × 2160 (24, 25 od 30 Hz) 2048 × 2160 (60 Hz) 2048 × 2048 (60 Hz) Further VESA and CEA standardised resolution possible for video bandwidth/ pixel rate and horizontal/vertical frequency. |
| Vertical frequency: | 24 Hz to 120 Hz |
| Horizontal frequency: | 25 kHz to 185 kHz |
| USB 2.0 Full Speed (-ARU variant) | |
| Specification: | USB 2.0 |
| Transmission type: | transparent |
| Supported devices: | high power devices (up to 500 mA) |
| Range: | max. 140 meters |
| USB 2.0 high speed (-ARU2 variant) | |
| Specification: | USB 2.0 |
| Transmission type: | transparent |
| Transmission rate: | max. 480 Mbit/s |
| Supported devices: | high power devices (up to 500 mA) |
| Range: | max. 100 meters |
| Main power supply | |
| Type: | internal power pack |
| Connector: | IEC plug (IEC-320 C14) |
| Voltage: | AC100-240V/60-50Hz |
| Redundant power supply | |
| Type: | external power pack |
| Connector: | miniDIN-4 Power socket |
| Voltage: | +12VDC |

DP-Vision-CAT



DP-Vision-CAT-ARU user module



DP-Vision-CAT-ARU user module

Specific features of single-channel devices

| | DP-VISION-CAT-CPU | DP-VISION-CAT-CON |
|---|--|--|
| Interfaces for local console | | |
| Monitor: | 1 × DisplayPort jack | - |
| Interfaces for remote console | | |
| Monitor: | - | 1 × DisplayPort jack |
| Interfaces for computer | | |
| Video: | 1 × DisplayPort jack | - |
| Interfaces to console module | | |
| KVM, Audio and RS232 (When using the -ARU variant the signals of USB 2.0 devices are transmitted via this cable.) | 1 × RJ 45 socket | - |
| USB 2.0 (-ARU2 variant) | 1 × RJ45-Buchse | - |
| Interface to computer module | | |
| KVM, Audio and RS232 (When using the -ARU variant the signals of USB 2.0 devices are additionally transmitted via this cable.) | - | 1 × RJ 45 socket |
| USB 2.0 (-ARU2 variant) | - | 1 × RJ 45 socket |
| Casing | | |
| Material: | anodised aluminium | |
| Dimensions (B × H × T) -AR and -ARU variants | 210 × 44 × 210 mm (Desktop) 19" × 1 HE × 210 mm (Rackmount) | - |
| Dimensions (B × H × T) -ARU2 variant | 270 × 44 × 210 mm (Desktop) 19" × 1 HE × 210 mm (Rackmount) | - |
| Dimensionen (B × H × T) | - | 210 × 44 × 210 mm (Desktop) 19" × 1 HE × 210 mm (Rackmount) |
| Operating environment | | |
| Temperature: | +5 to +45 °C | |
| Air humidity: | < 80 %, non-condensing | |

DP-Vision-CAT-MC2



DP-Vision-CAT-MC2-ARU computer module



DP-Vision-CAT-MC2-ARU computer module

Specific features of multi-channel devices

| | DP-VISION-CAT-MC2-CPU | DP-VISION-CAT-MC2-CON |
|---|------------------------|-----------------------|
| Interfaces for local console | | |
| Monitor: | 2 × DisplayPort jack | - |
| Interfaces for remote console | | |
| Monitor: | - | 2 × DisplayPort jack |
| Interfaces for computer | | |
| Video: | 2 × DisplayPort jack | - |
| Interfaces to user module | | |
| KVM, Audio and RS232 (When using the -ARU variant the signals of USB 2.0 devices are transmitted via this cable.) | 2 × RJ 45 socket | - |
| USB 2.0 (-ARU2 variant) | 1 × RJ 45 socket | - |
| Interfaces to computer module | | |
| KVM, Audio and RS232 (When using the -ARU variant the signals of USB 2.0 devices are additionally transmitted via this cable.) | - | 2 × RJ 45 socket |
| USB 2.0 (-ARU2 variant) | - | 1 × RJ 45 socket |
| Casing | | |
| Material: | anodised aluminium | |
| Dimensions (W × H × D): | 270 × 44 × 210 mm | |
| Operating environment | | |
| Temperature: | +5 to +45 °C | |
| Air humidity: | < 80 %, non-condensing | |

DP-Vision-CAT-MC4



DP-Vision-CAT-MC4-AR computer module



DP-Vision-CAT-MC4-AR computer module

Specific features of multi-channel devices

| | DP-VISION-CAT-MC4-CPU | DP-VISION-CAT-MC4-CON |
|--|------------------------|-----------------------|
| Interfaces for local console | | |
| Monitor: | 4 × DisplayPort jack | - |
| Interfaces for remote console | | |
| Monitor: | - | 4 × DisplayPort jack |
| Interfaces for computer | | |
| Video: | 4 × DisplayPort jack | - |
| Interfaces to user module | | |
| KVM, Audio und RS232 (When using the -ARU variant the signals of USB 2.0 devices are transmitted via this cable.) | 4 × RJ 45 socket | - |
| USB 2.0 (Variante -ARU2) | 1 × RJ 45 socket | - |
| Interfaces to computer module | | |
| KVM, Audio und RS232 (When using the -ARU variant the signals of USB 2.0 devices are additionally transmitted via this cable) | - | 4 × RJ 45 socket |
| USB 2.0 (-ARU2 variant) | - | 1 × RJ 45 socket |
| Casing | | |
| Material: | anodised aluminium | |
| Dimensions (W × H × D): | 435 × 44 × 210 mm | |
| Operating environment | | |
| Temperature: | +5 to +45 °C | |
| Air humidity: | < 80 %, non-condensing | |

Current consumption

| Device variant | Main power supply | Redundant power supply |
|----------------|-----------------------------|------------------------|
| AR-CPU | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.1A |
| AR-CON | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.3A |
| ARU-CPU | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.1A |
| ARU-CON | 100-240V, 60-50Hz, 0.5-0.3A | 12VDC/2.2A |
| ARU2-CPU | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.2A |
| ARU2-CON | 100-240V, 60-50Hz, 0.5-0.3A | 12VDC/2.3A |
| MC2-AR-CPU | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.7A |
| MC2-AR-CON | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.8A |
| MC2-ARU-CPU | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.7A |
| MC2-ARU-CON | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/2.8A |
| MC2-ARU2-CPU | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.8A |
| MC2-ARU2-CON | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/2.9A |
| MC4-AR-CPU | 100-240V, 60-50Hz, 0.5-0.3A | 12VDC/3.0A |
| MC4-AR-CON | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/3.0A |
| MC4-ARU-CPU | 100-240V, 60-50Hz, 0.5-0.3A | 12VDC/3.1A |
| MC4-ARU-CON | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/4.0A |
| MC4-ARU2-CPU | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/3.1A |
| MC4-ARU2-CON | 100-240V, 60-50Hz, 0.6-0.4A | 12VDC/4.1A |

DP-Vision-Fiber



DP-Vision-Fiber-AR computer module



DP-Vision-Fiber-AR computer module

General features of the series DP-Vision-Fiber

| Technical data | |
|--------------------------------------|---|
| Interfaces for computers | |
| Video | --> see specific features |
| PS/2 keyboard/mouse: | 2 × PS/2 socket |
| USB keyboard/mouse: | 1 × USB-B socket |
| Audio | 3.5-mm jack plug (Line In) 3.5-mm jack plug (Line Out) |
| USB 2.0 variant -ARU | Shared transmission of signals of USB devices as well as keyboard and mouse via USB-B socket. |
| USB 2.0 variant -ARU2 | 1 × USB-B socket |
| RS232 | 1 × RS232 socket |
| Interfaces for remote console | |
| Monitor: | --> see specific features |
| PS/2 keyboard/mouse: | 2 × PS/2 socket |
| USB keyboard/mouse: | 2 × USB-A socket |
| Generic-HID | 1 × USB-A socket |
| Audio | 3.5-mm jack plug (Speaker) 3.5-mm jack plug (Micro In) |
| USB 2.0 variant -ARU | 2 × USB-A socket |
| USB 2.0 variant -ARU2 | 2 × USB-A socket (front panel) 2 × USB-A socket (back panel) |
| RS232 | 1 × RS232 plug |
| Interfaces for local console | |
| Monitor: | --> see specific features |
| PS/2 keyboard: | 1 × PS/2 socket |
| USB keyboard/mouse: | 2 × USB-A socket |
| Other interfaces | |
| Connection to network: | 1 × RJ 45 socket |
| Service: | 1 × Mini-USB socket (type B) |
| Audio | |
| Transmission type: | transparent, bidirectional |
| Resolution: | 24 bit digital, Stereo |
| Sampling rate: | 96 kHz |
| Bandwidth: | 22 kHz |

General features of the series DP-Vision-Fiber

| Technical data | |
|---|---|
| RS232 | |
| Transmission type: | transparent |
| Transmission rate: | max. 115.200 bit/s |
| Supported signals: | RxD, TxD, RTS, CTS, DTR, DSR, DCD |
| Graphics | |
| Format: | DisplayPort (DP 1.1a) |
| Colour depth: | 24 Bit |
| Video bandwidth: | 25 to 300 MP / s, DisplayPort 4 Lanes, HBR 2.7 Gbps |
| Max. resolution: | 2560 × 1600 (60 Hz) 4096 × 2160 (30 Hz) |
| Exemplary resolutions: | 4096 × 2160 (24 od 25 Hz) 3840 × 2160 (24, 25 od 30 Hz) 2048 × 2160 (60 Hz) 2048 × 2048 (60 Hz) Further VESA and CEA standardised resolution possible for video bandwidth/ pixel rate and horizontal/vertical frequency. |
| Vertical frequency: | 24 Hz to 120 Hz |
| Horizontal frequency: | 25 kHz to 185 kHz |
| USB 2.0 Full Speed (-ARU variant) | |
| Specification: | USB 2.0 |
| Transmission type: | transparent |
| Supported devices: | high power devices (up to 500 mA) |
| Range: | max. 10.000 meters |
| USB 2.0 high speed (-ARU2 variant) | |
| Specification: | USB 2.0 |
| Transmission type: | transparent |
| Transmission rate: | max. 480 Mbit/s |
| Supported devices: | high power devices (up to 500 mA) |
| Range: | max. 10.000 meters |
| Main power supply | |
| Type: | internal power pack |
| Connector: | IEC plug (IEC-320 C14) |
| Voltage: | AC100-240V/60-50Hz |
| Redundant power supply | |
| Type: | external power pack |
| Connector: | miniDIN-4 Power socket |
| Voltage: | +12VDC |

DP-Vision-Fiber



DP-Vision-Fiber-AR user module



DP-Vision-Fiber-AR user module

Specific features of single-channel devices

| | DP-VISION-FIBER-CPU | DP-VISION-FIBER-CON |
|---|--|--|
| Interfaces for local console | | |
| Monitor: | 1 × DisplayPort jack | - |
| Interfaces for remote console | | |
| Monitor: | - | 1 × DisplayPort jack |
| Interfaces for computer | | |
| Video: | 1 × DisplayPort jack | - |
| Interfaces to user module | | |
| KVM, Audio and RS232 (When using the -ARU variant the signals of USB 2.0 devices are transmitted via this cable.) | 1 × LC duplex socket | - |
| USB 2.0 (-ARU2 variant) | 1 × LC duplex socket | - |
| Interface to computer module | | |
| KVM, Audio and RS232 (When using the -ARU variant the signals of USB 2.0 devices are additionally transmitted via this cable.) | - | 1 × LC duplex socket |
| USB 2.0 (-ARU2 variant) | - | 1 × LC duplex socket |
| Casing | | |
| Material: | anodised aluminium | |
| Dimensions (B × H × T) -AR and -ARU variants | 210 × 44 × 210 mm (Desktop) 19" × 1 HE × 210 mm (Rackmount) | - |
| Dimensions (B × H × T) -ARU2 variant | 270 × 44 × 210 mm (Desktop) 19" × 1 HE × 210 mm (Rackmount) | - |
| Dimensionen (B × H × T) | - | 210 × 44 × 210 mm (Desktop) 19" × 1 HE × 210 mm (Rackmount) |
| Operating environment | | |
| Temperature: | +5 to +45 °C | |
| Air humidity: | < 80 %, non-condensing | |

DP-Vision-Fiber-MC2



DP-Vision-Fiber-MC2-AR user module



DP-Vision-Fiber-MC2-AR user module

Specific features of multi-channel devices

| | DP-VISION-Fiber-MC2-CPU | DP-VISION-Fiber-MC2-CON |
|--|-------------------------|-------------------------|
| Interfaces for local console | | |
| Monitor: | 2 × DisplayPort jack | - |
| Interfaces for remote console | | |
| Monitor: | - | 2 × DisplayPort jack |
| Interfaces for computer | | |
| Video: | 2 × DisplayPort jack | - |
| Interfaces to user module | | |
| KVM, Audio and RS232: (When using the -ARU variant the signals of USB 2.0 devices are transmitted via this cable.) | 2 × LC duplex socket | - |
| USB 2.0 (-ARU2 variant) | 1 × LC duplex socket | - |
| Interfaces to computer module | | |
| KVM, Audio and RS232: (When using the -ARU variant the signals of USB 2.0 devices are additionally transmitted via this cable.) | - | 2 × LC duplex socket |
| USB 2.0 (-ARU2 variant) | - | 1 × LC duplex socket |
| Casing | | |
| Material: | anodised aluminium | |
| Dimensions (W × H × D): | 270 × 44 × 210 mm | |
| Operating environment | | |
| Temperature: | +5 to +45 °C | |
| Air humidity: | < 80 %, non-condensing | |

DP-Vision-Fiber-MC4



DP-Vision-Fiber-MC4-AR user module



DP-Vision-Fiber-MC4-AR user module

Specific features of multi-channel devices

| | DP-VISION-Fiber-MC4-CPU | DP-VISION-Fiber-MC4-CON |
|---|-------------------------|-------------------------|
| Interfaces for local console | | |
| Monitor: | 4 × DisplayPort jack | - |
| Interfaces for remote console | | |
| Monitor: | - | 4 × DisplayPort jack |
| Interfaces for computer | | |
| Video: | 4 × DisplayPort jack | - |
| Interfaces to user module | | |
| KVM, Audio und RS232: (When using the -ARU variant the signals of USB 2.0 devices are transmitted via this cable.) | 4 × LC duplex socket | - |
| USB 2.0 (Variante -ARU2) | 1 × LC duplex socket | - |
| Interfaces to computer module | | |
| KVM, Audio und RS232: (When using the -ARU variant the signals of USB 2.0 devices are additionally transmitted via this cable) | - | 4 × LC duplex socket |
| USB 2.0 (-ARU2 variant) | - | 1 × LC duplex socket |
| Casing | | |
| Material: | anodised aluminium | |
| Dimensions (W × H × D): | 435 × 44 × 210 mm | |
| Operating environment | | |
| Temperature: | +5 to +45 °C | |
| Air humidity: | < 80 %, non-condensing | |

Current consumption

| Device variant | Main power supply | Redundant power supply |
|----------------|-----------------------------|------------------------|
| AR-CPU | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.1A |
| AR-CON | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.3A |
| ARU-CPU | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.1A |
| ARU-CON | 100-240V, 60-50Hz, 0.5-0.3A | 12VDC/2.2A |
| ARU2-CPU | 100-240V, 60-50Hz, 0.3-0.2A | 12VDC/1.3A |
| ARU2-CON | 100-240V, 60-50Hz, 0.5-0.3A | 12VDC/2.4A |
| MC2-AR-CPU | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.8A |
| MC2-AR-CON | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.9A |
| MC2-ARU-CPU | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.8A |
| MC2-ARU-CON | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/2.9A |
| MC2-ARU2-CPU | 100-240V, 60-50Hz, 0.4-0.2A | 12VDC/1.9A |
| MC2-ARU2-CON | 100-240V, 60-50Hz, 0.7-0.3A | 12VDC/3.0A |
| MC4-AR-CPU | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/3.1A |
| MC4-AR-CON | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/3.2A |
| MC4-ARU-CPU | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/3.1A |
| MC4-ARU-CON | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/4.1A |
| MC4-ARU2-CPU | 100-240V, 60-50Hz, 0.6-0.3A | 12VDC/3.3A |
| MC4-ARU2-CON | 100-240V, 60-50Hz, 0.6-0.4A | 12VDC/4.3A |

List of item numbers CAT single-channel

| Item No. | Description | USB 2.0 | Design |
|----------|------------------------|---------|---------|
| A1120195 | DP-Vision-CAT-AR-CON | | Desktop |
| A1110166 | DP-Vision-CAT-AR-CPU | | Desktop |
| A1120187 | DP-Vision-CAT-ARU2-CON | USB 2.0 | Desktop |
| A1110158 | DP-Vision-CAT-ARU2-CPU | USB 2.0 | Desktop |
| A1120188 | DP-Vision-CAT-ARU-CON | USB 2.0 | Desktop |
| A1110159 | DP-Vision-CAT-ARU-CPU | USB 2.0 | Desktop |

List of item numbers CAT multi-channel

| Item No. | Description | USB 2.0 | Design |
|----------|----------------------------|---------|-----------------------|
| A1220200 | DP-Vision-CAT-MC2-AR-CON | | Desktop |
| A1210169 | DP-Vision-CAT-MC2-AR-CPU | | Desktop |
| A1220202 | DP-Vision-CAT-MC2-ARU-CON | USB 2.0 | Desktop |
| A1210171 | DP-Vision-CAT-MC2-ARU-CPU | USB 2.0 | Desktop |
| A1220201 | DP-Vision-CAT-MC2-ARU2-CON | USB 2.0 | Desktop |
| A1210170 | DP-Vision-CAT-MC2-ARU2-CPU | USB 2.0 | Desktop |
| A1320035 | DP-Vision-CAT-MC3-AR-CON | | Desktop |
| A1310044 | DP-Vision-CAT-MC3-AR-CPU | | Desktop |
| A1320036 | DP-Vision-CAT-MC3-ARU-CON | USB 2.0 | Desktop |
| A1310045 | DP-Vision-CAT-MC3-ARU-CPU | USB 2.0 | Desktop |
| A1320037 | DP-Vision-CAT-MC3-ARU2-CON | USB 2.0 | Desktop |
| A1310046 | DP-Vision-CAT-MC3-ARU2-CPU | USB 2.0 | Desktop |
| A1420203 | DP-Vision-CAT-MC4-AR-CON | | Desktop/Rackmount-Kit |
| A1410172 | DP-Vision-CAT-MC4-AR-CPU | | Desktop/Rackmount-Kit |
| A1420199 | DP-Vision-CAT-MC4-ARU-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410168 | DP-Vision-CAT-MC4-ARU-CPU | USB 2.0 | Desktop/Rackmount-Kit |
| A1420198 | DP-Vision-CAT-MC4-ARU2-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410167 | DP-Vision-CAT-MC4-ARU2-CPU | USB 2.0 | Desktop/Rackmount-Kit |

List of item numbers Fiber single-channel

| Item No. | Description | USB 2.0 | Design |
|----------|------------------------------|---------|---------|
| A1120189 | DP-Vision-Fiber(M)-AR-CON | | Desktop |
| A1110160 | DP-Vision-Fiber(M)-AR-CPU | | Desktop |
| A1120191 | DP-Vision-Fiber(M)-ARU-CON | USB 2.0 | Desktop |
| A1110162 | DP-Vision-Fiber(M)-ARU-CPU | USB 2.0 | Desktop |
| A1120190 | DP-Vision-Fiber(M)-ARU2-CON | USB 2.0 | Desktop |
| A1110161 | DP-Vision-Fiber(M)-ARU2-CPU | USB 2.0 | Desktop |
| A1120192 | DP-Vision-Fiber(S)-AR-CON | | Desktop |
| A1110163 | DP-Vision-Fiber(S)-AR-CPU | | Desktop |
| A1120194 | DP-Vision-Fiber(S)-ARU-CON | USB 2.0 | Desktop |
| A1110165 | DP-Vision-Fiber(S)-ARU-CPU | USB 2.0 | Desktop |
| A1120193 | DP-Vision-Fiber(S)-ARU2-CON | USB 2.0 | Desktop |
| A1110164 | DP-Vision-Fiber(S)-ARU2-CPU | USB 2.0 | Desktop |
| A1110190 | DP-Vision-Fiber(S+)-AR-CPU | | Desktop |
| A1120282 | DP-Vision-Fiber(S+)-AR-CON | | Desktop |
| A1120284 | DP-Vision-Fiber(S+)-ARU-CON | USB 2.0 | Desktop |
| A1110192 | DP-Vision-Fiber(S+)-ARU-CPU | USB 2.0 | Desktop |
| A1120283 | DP-Vision-Fiber(S+)-ARU2-CON | USB 2.0 | Desktop |
| A1110191 | DP-Vision-Fiber(S+)-ARU2-CPU | USB 2.0 | Desktop |

List of item numbers Fiber multi-channel multimode

| Item No. | Description | USB 2.0 | Design |
|----------|-----------------------------|---------|-----------------------|
| A1220229 | DP-Vision-F(M)-MC2-AR-CON | | Desktop |
| A1210195 | DP-Vision-F(M)-MC2-AR-CPU | | Desktop |
| A1220231 | DP-Vision-F(M)-MC2-ARU-CON | USB 2.0 | Desktop |
| A1210197 | DP-Vision-F(M)-MC2-ARU-CPU | USB 2.0 | Desktop |
| A1220230 | DP-Vision-F(M)-MC2-ARU2-CON | USB 2.0 | Desktop |
| A1210196 | DP-Vision-F(M)-MC2-ARU2-CPU | USB 2.0 | Desktop |
| A1320038 | DP-Vision-F(M)-MC3-AR-CON | | Desktop |
| A1310047 | DP-Vision-F(M)-MC3-AR-CPU | | Desktop |
| A1320039 | DP-Vision-F(M)-MC3-ARU-CON | USB 2.0 | Desktop |
| A1310048 | DP-Vision-F(M)-MC3-ARU-CPU | USB 2.0 | Desktop |
| A1320040 | DP-Vision-F(M)-MC3-ARU2-CON | USB 2.0 | Desktop |
| A1310049 | DP-Vision-F(M)-MC3-ARU2-CPU | USB 2.0 | Desktop |
| A1420242 | DP-Vision-F(M)-MC4-AR-CON | | Desktop/Rackmount-Kit |
| A1410198 | DP-Vision-F(M)-MC4-AR-CPU | | Desktop/Rackmount-Kit |
| A1420232 | DP-Vision-F(M)-MC4-ARU-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410189 | DP-Vision-F(M)-MC4-ARU-CPU | USB 2.0 | Desktop/Rackmount-Kit |
| A1420243 | DP-Vision-F(M)-MC4-ARU2-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410188 | DP-Vision-F(M)-MC4-ARU2-CPU | USB 2.0 | Desktop/Rackmount-Kit |

List of item numbers Fiber multi-channel singlemode

| Item No. | Description | USB 2.0 | Design |
|----------|-----------------------------|---------|-----------------------|
| A1220233 | DP-Vision-F(S)-MC2-AR-CON | | Desktop |
| A1210198 | DP-Vision-F(S)-MC2-AR-CPU | | Desktop |
| A1220235 | DP-Vision-F(S)-MC2-ARU-CON | USB 2.0 | Desktop |
| A1210191 | DP-Vision-F(S)-MC2-ARU-CPU | USB 2.0 | Desktop |
| A1220234 | DP-Vision-F(S)-MC2-ARU2-CON | USB 2.0 | Desktop |
| A1210199 | DP-Vision-F(S)-MC2-ARU2-CPU | USB 2.0 | Desktop |
| A1320041 | DP-Vision-F(S)-MC3-AR-CON | | Desktop |
| A1310050 | DP-Vision-F(S)-MC3-AR-CPU | | Desktop |
| A1320042 | DP-Vision-F(S)-MC3-ARU-CON | USB 2.0 | Desktop |
| A1310051 | DP-Vision-F(S)-MC3-ARU-CPU | USB 2.0 | Desktop |
| A1320043 | DP-Vision-F(S)-MC3-ARU2-CON | USB 2.0 | Desktop |
| A1310052 | DP-Vision-F(S)-MC3-ARU2-CPU | USB 2.0 | Desktop |
| A1420236 | DP-Vision-F(S)-MC4-AR-CON | | Desktop/Rackmount-Kit |
| A1410192 | DP-Vision-F(S)-MC4-AR-CPU | | Desktop/Rackmount-Kit |
| A1420238 | DP-Vision-F(S)-MC4-ARU-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410194 | DP-Vision-F(S)-MC4-ARU-CPU | USB 2.0 | Desktop/Rackmount-Kit |
| A1420237 | DP-Vision-F(S)-MC4-ARU2-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410193 | DP-Vision-F(S)-MC4-ARU2-CPU | USB 2.0 | Desktop/Rackmount-Kit |

List of item numbers Fiber multi-channel singlemode +





























| Item No. | Description | USB 2.0 | DT |
|----------|------------------------------|---------|-----------------------|
| A1220227 | DP-Vision-F(S+)-MC2-AR-CON | | Desktop |
| A1210192 | DP-Vision-F(S+)-MC2-AR-CPU | | Desktop |
| A1220232 | DP-Vision-F(S+)-MC2-ARU-CON | USB 2.0 | Desktop |
| A1210194 | DP-Vision-F(S+)-MC2-ARU-CPU | USB 2.0 | Desktop |
| A1220228 | DP-Vision-F(S+)-MC2-ARU2-CON | USB 2.0 | Desktop |
| A1210193 | DP-Vision-F(S+)-MC2-ARU2-CPU | USB 2.0 | Desktop |
| A1320044 | DP-Vision-F(S+)-MC3-AR-CON | | Desktop |
| A1310053 | DP-Vision-F(S+)-MC3-AR-CPU | | Desktop |
| A1320045 | DP-Vision-F(S+)-MC3-ARU-CON | USB 2.0 | Desktop |
| A1310054 | DP-Vision-F(S+)-MC3-ARU-CPU | USB 2.0 | Desktop |
| A1320046 | DP-Vision-F(S+)-MC3-ARU2-CON | USB 2.0 | Desktop |
| A1310055 | DP-Vision-F(S+)-MC3-ARU2-CPU | USB 2.0 | Desktop |
| A1420239 | DP-Vision-F(S+)-MC4-AR-CON | | Desktop/Rackmount-Kit |
| A1410195 | DP-Vision-F(S+)-MC4-AR-CPU | | Desktop/Rackmount-Kit |
| A1420241 | DP-Vision-F(S+)-MC4-ARU-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410197 | DP-Vision-F(S+)-MC4-ARU-CPU | USB 2.0 | Desktop/Rackmount-Kit |
| A1420240 | DP-Vision-F(S+)-MC4-ARU2-CON | USB 2.0 | Desktop/Rackmount-Kit |
| A1410196 | DP-Vision-F(S+)-MC4-ARU2-CPU | USB 2.0 | Desktop/Rackmount-Kit |

Legend

ABBREVIATIONS

| | | | | | |
|-----|---|-----------------|----|---|-------------------------------------|
| CPU | = | Computer module | RM | = | For assembly in a 19" rack |
| PC | = | Computer module | DT | = | Desktop device |
| CON | = | User module | DP | = | DisplayPort™ |
| REM | = | User module | A | = | Audio |
| MC2 | = | Multi channel 2 | R | = | RS232 |
| MC3 | = | Multi channel 3 | U | = | integr. USB 2.0 up to 16 MBit/s |
| MC4 | = | Multi channel 4 | U2 | = | transp. USB 2.0 Hi-Speed 480 Mbit/s |
| M | = | Multi mode | D | = | Delay |
| S | = | Single mode | | | |
| S+ | = | Single mode+ | | | |

EQUIPMENT FEATURES

| | | | |
|---|---------------------------|---|----------------------------|
|  | Audio |  | Modular setup |
|  | CAT cable |  | Monitoring |
|  | CrossDisplay-Switching |  | Multi user |
|  | Delay |  | Multi channel Video |
|  | DisplayPort™ 1.1 |  | Network connection |
|  | DVI Dual link video |  | Power switching |
|  | DVI Single link video |  | Remote IP |
|  | Expansion |  | RS 232 |
|  | Fiber optics |  | Screen Freeze |
|  | Keyboard/Mouse |  | Separate local/remote user |
|  | KVM over IP |  | Single user |
|  | KVM-NetworkCenter-Support |  | USB 2.0 |
|  | Media control |  | VGA Video |
|  | Mix & Match |  | Web interface |