

# DP1.2-VISIONXG-FIBER(S)-ARU2-CPU

KVM extenders, Article number A1110194



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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 x 2160 (60 Hz) or 5120 x 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
1	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)
- Embedded USB 2.0 with Hi-Speed, transparent, all USB classes

### TRANSMISSION

- The transmission distance 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
- 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
- Early detection of security incidents or unusual activities through continuous monitoring via Syslog, monitoring, and SNMP
- 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	2
	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	10 Gbit/s
Video input	Quantity	1
	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) 3840 × 2160 (60 Hz) 2560 × 1600 (60 Hz) 2560 × 1440 (144 Hz) 2048 × 2048 (60 Hz) 1920 × 1200 (60 Hz) 1920 × 1080 (240 Hz) 1920 × 1080 (60 Hz) 5120 × 1440 (60 Hz) 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	1
	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) 3840 × 2160 (60 Hz) 2560 × 1600 (60 Hz) 2560 × 1440 (144 Hz) 2048 × 2048 (60 Hz) 1920 × 1200 (60 Hz) 1920 × 1080 (240 Hz) 1920 × 1080 (60 Hz) 5120 × 1440 (60 Hz) 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) Extended Display Identification Data (EDID)
Audio 1	Transmission type	Stereo 2-channel LPCM
	Resolutions	24 bit 20 bit 16 bit
	Sampling rate	up to 48 kHz
	Audio support	Digital Embedded
Audio 2	Transmission type	Stereo Transparent
	Resolutions	24 bit digital
	Sampling rate	up to 96 kHz
	Bandwidth	22 kHz
	Audio support	Analog

USB	Separate USB transmission port	no
	Specification	USB 2.0
	Medium	Embedded
	Transmission rate	max. 480 Mbit/s (Hi-Speed)
	Range	max. 10,000 m
	USB classes	All
Serial	Standard	RS232
	Transparent transmission	yes
	Data rate	max. 230,400 bps
	Signals	TxD RxD DTR DSR RTS CTS DCD
Network	Quantity	2
	Medium	CAT5 CAT6 CAT7
	Data rate	10 Mbit/s 100 Mbit/s 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
	Height ca.	44 mm
	Depth ca.	210 mm
	IP protection class	IP20
	Weight ca.	2.61 kg
Operating conditions	Operating environment temperature	5 °C to 45 °C
	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
	Storage air humidity, non-condensing	15 % to 80 %
	MTBF	146,000 h at 25°C
	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) UL compliant (see downloads) CB compliant (see downloads) FCC compliant (see manual) TAA compliant (see downloads) EAC compliant (see downloads) RoHS compliant (see downloads) WEEE (reg. no. DE30763240) REACH compliant (see downloads) CE compliant (see downloads)
Power supply	Quantity	2
	Type	Internal
	Input voltage	100-240 VAC
	Input frequency	60-50 Hz
	Current consumption	0.8-0.4 A
	Power consumption max.	32.7 W
	Heat output max.	30.7 W / 104.75 BTU/h

## ACCESSORY PRODUCTS

Image	Description	Article number
	<b>USB-Service-2 cable 2m</b> Cable for system updates and configuration	A6200103
	<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>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>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>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

## MORE VARIANTS

Description	Article number
<b>DP1.2-VisionXG-Fiber(S)-AR-CPU</b> Computer module to extend uncompressed DisplayPort signals via fiber singlemode	A1110193
<b>DP1.2-VisionXG-Fiber(S)-MC2-AR-CPU</b> Computer module to extend uncompressed DisplayPort signals via fiber singlemode	A1210202
<b>DP1.2-VisionXG-Fiber(S)-MC2-ARU2-CPU</b> Computer module to extend uncompressed DisplayPort signals via fiber singlemode	A1210203

# 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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