

# VISIONXS-CON-C-DP-HR-AR-DT

KVM extenders, Article number A1120401



The matrix-compatible KVM extenders of the VisionXS-DP-HR 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). An extender system consists of a computer module (CPU) and a compatible console module (CON). Computers can be controlled in near real-time – both in extender and matrix applications. The VisionXS-DP-HR series supports DisplayPort 1.1 for high-resolution video up to 2560 x 1600 (60 Hz) or 4096 x 2160 (30 Hz). Video data is processed pixel-perfectly and offers excellent hand-eye coordination, thanks to bluedec™ – G&D's advanced, multi-stage, lossless compression technology.

## SCOPE OF DELIVERY

Quantity	Description	Article number
1	PowerCable-2 Standard cable 2m	A6300057
1	Safety instructions flyer - FCC class B	A9100371
1	Power supply usage flyer	A9100409

## DETAILS

### 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 end devices can be flexibly combined with each other, even if they process different video signals (Mix & Match)
- EDID data utilization from the workplace monitor
- Flexible EDID profile options for optimized monitor settings
- Resolution up to  
2560 × 1600 @ 60 Hz,  
4096 × 2160 @ 30 Hz

### SIGNALS

- Embedded stereo audio (DisplayPort Digital, 2 channel LPCM, AC3, DTS)
- Transparent audio signals (stereo, analog)
- Transparent RS232 (max. 115,200 bps)
- GenericUSB support for USB classes HID (Human Interface Device), SmartCard and mass storage
- The product allows the use of a GenericUSB device via a console module. For this, both the used console module and the used computer module must support the use of a GenericUSB device.

### TRANSMISSION

- The transmission distance is up to 140 meters over CAT

### DEVICE

- Improved security through physical separation between workplaces and computers
- Access to standard interfaces of the computer, with no software installation required
- Compact design for space-saving installation within a VisionXS DeviceCarrier (1 or 3 RU)
- The devices are compatible with the ControlCenter-Digital and ControlCenter-Compact series (matrix operation) and other end devices for computer and workplace connections (extender operation)
- PowerPack not included in the scope of delivery
- DT variant: Optional redundant power supply via an internal power unit for high reliability
- Fanless variant: fanless model

### WARRANTY

- A 3-year, free of charge product guarantee



- For an additional fee guarantee extension possible

## FEATURES

### SECURITY FEATURES

- Bootloader, operating system, and firmware form a "Trusted Computing Platform" with automatic integrity checks during system startup
- Integrated Trusted Platform Module (TPM) protects all access and configuration data from being spied on or tampered with by third parties
- 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
- To comply with individual password policies and improve security, password complexity can be configured system-wide
- Configurable login options, such as displaying terms of use or setting the maximum acceptable number of failed login attempts, can enhance system security
- Auto Backup Function: Automates backups at user-defined intervals and replaces manual intervention – ensuring reliable, timely data protection without the need for continuous monitoring
- Freeze function: If the video signal is lost, the last displayed image is frozen and highlighted with a colored frame and timer
- 2-Factor-Authentication (2FA) – is integrated by default in KVM extenders and enhances security by requiring a second, possession-based factor during user authentication:
  - The traditional password authentication is combined with a time-limited, single-use code (Time-Based-One-Time-Password - TOTP)
  - You can choose between using the internal authentication server provided in the device or an external directory service
  - Authenticator apps or hardware token can be used
  - This additional layer of protection prevents unauthorized access and ensures the highest level of security, particularly in sensitive IT environments

### 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

## EXTENSIONS

### DEVICE

- External power supply via external 12V power pack or G&D-MultiPower, providing a central and redundant power supply
- Device mounting via G&D 19” DeviceCarrier for VisionXS (1 or 3 RU)

### SYSTEM EXTENSION

- Transm. Redundancy Option (comparable to UC/CON-2): Devices are prepared for transmission redundancy without additional hardware and can be activated via software feature key.
  - Computer modules can connect to various counterparts, such as compatible console modules or KVM matrix switches
  - Console modules can connect to different counterparts, such as compatible computer modules or KVM matrix switches, with switching controlled via hotkey or automatically depending on configuration
  - U2 variants do not support the Transm. Redundancy Option as the 2nd transmission interface is used for the transmission of USB 2.0 data
- You can integrate the matrix-compatible extenders into a complete installation with a ControlCenter-Compact or ControlCenter-Digital, 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.

## PANELS AND CONNECTORS

### FRONT



Aperture designation	Design	Description
Line Out	Jack socket - 3,5 mm	Port for speaker/headset
Serial	D-Sub9 jack	Port for serial devices
USB Devices - 1	USB-A socket 2.0	Port for USB devices (Generic)
USB Devices - 2	USB-A socket 2.0	Port for USB devices (Generic)
USB Devices - G	USB-A socket 2.0	Port for USB devices (Generic)
Keyb./Mouse	USB-A socket 2.0	Port for keyboard and mouse
DP Out	DisplayPort socket	Port for monitor

BACK



Aperture designation	Design	Description
Transmission 1	RJ45 socket	Data transmission to computer module or matrix switch (CAT)
Transmission 2	RJ45 socket	Data transmission to computer module or matrix switch redundant (CAT)
Service	Micro-USB socket	Port for service purposes
Network	RJ45 socket	Port for IP network
Main Power	Mini-DIN 4 socket	Power supply DC
Red. Power	IEC plug 320 C14	Power supply AC redundant

## TECHNICAL DATA

General	Product group	KVM extenders
	Product Family	VisionXS
	Number of workstations	1
	KVM matrix system component	Console 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	optional redundant KVM transmission
	Range	140 m (AWG22) 100 m (AWG24) 80 m (AWG26)
	Medium	CAT5e CAT6 CAT7
	Data rate	1 Gbit/s
Video output	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)
Audio 1	Transmission type	2-channel LPCM Stereo DTS AC3
	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
	GenericUSB support	1 device
	Medium	Embedded
	Transmission rate	max. 25 Mbit/s (Full Speed)
	USB classes	Mass Storage (MSC / UMS) Human Interface Device (HID) SmartCard
	Standard	RS232
Serial	Transparent transmission	yes
	Data rate	115,200 bps
	Signals	TxD RxD RTS CTS GND 5V
	Quantity	1
Network	Medium	CAT5 CAT6 CAT7
	Data rate	10 Mbit/s 100 Mbit/s
	Update via	ConfigPanel (Network)
Maintenance	Serviceport settings	115200bps (8/N/1)

Housing	Material	Anodised aluminium
	Width ca.	170 mm
	Height ca.	40 mm
	Depth ca.	184 mm
	IP protection class	IP20
	Weight ca.	1.26 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	3,048 m
	Storage environment temperature	-20 °C to 60 °C
	Storage air humidity, non-condensing	15 % to 85 %
	MTBF	200,000 h at 25°C
	Conformities	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) UKCA compliant (see downloads)
Power supply 1	Quantity	1
	Type	External

	Input voltage	12 VDC
	Current consumption	1.9 A
	Power consumption idle	9 W
	Power consumption max.	20.6 W
	Heat output idle	9 W
	Heat output max.	10.45 W
Power supply 2	Quantity	1
	Type	Internal
	Input voltage	100-240 VAC
	Input frequency	60-50 Hz
	Current consumption	0.5-0.4 A
	Power consumption idle	10.3-9.88 W
	Power consumption max.	23.09-22.57 W
	Heat output idle	10.3-9.88 W
	Heat output max.	12.95-12.35 W

## MORE VARIANTS

Description	Article number
<b>VisionXS-CON-2C-DP-HR-DT 2.0</b> Redundant console module to receive DisplayPort signals of 2 sources via CAT cable	A1120704
<b>VisionXS-CON-C-DP-HR</b> Console module to receive DisplayPort signals via CAT cable	A1120400
<b>VisionXS-CON-C-DP-HR-AR-DT fanless</b> Console module to receive DisplayPort signals via CAT cable	A1120497
<b>VisionXS-CON-C-DP-HR-AR-U-DT</b> Console module to receive DisplayPort signals via CAT cable	A1120402
<b>VisionXS-CON-C-DP-HR-AR-U2-DT</b> Console module to receive DisplayPort signals via CAT cable	A1120518
<b>VisionXS-CON-C-DP-HR-DH</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120460
<b>VisionXS-CON-C-DP-HR-DH-AR-DT</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120463
<b>VisionXS-CON-C-DP-HR-DH-AR-DT fanless</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120498
<b>VisionXS-CON-C-DP-HR-DH-AR-U-DT</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120462
<b>VisionXS-CON-C-DP-HR-DH-AR-U2-DT</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120519
<b>VisionXS-CON-C-DP-HR-DH-DT</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120465
<b>VisionXS-CON-C-DP-HR-DH-U</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120461
<b>VisionXS-CON-C-DP-HR-DH-U-DT</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120464



Description	Article number
<b>VisionXS-CON-C-DP-HR-DH-U2</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120520
<b>VisionXS-CON-C-DP-HR-DH-U2-DT</b> Dual head console module (CAT cable) to receive 2 DisplayPort signals using 1 transmission line	A1120521
<b>VisionXS-CON-C-DP-HR-DT</b> Console module to receive DisplayPort signals via CAT cable	A1120403
<b>VisionXS-CON-C-DP-HR-U</b> Console module to receive DisplayPort signals via CAT cable	A1120404
<b>VisionXS-CON-C-DP-HR-U-DT</b> Console module to receive DisplayPort signals via CAT cable	A1120405
<b>VisionXS-CON-C-DP-HR-U2</b> Console module to receive DisplayPort signals via CAT cable	A1120522
<b>VisionXS-CON-C-DP-HR-U2-DT</b> Console module to receive DisplayPort signals via CAT cable	A1120523

# 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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