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G&D Product data sheet - Oct 29, 2025 VisionXS-CPU-C-DP-UHR-U-DT
VisionXS-CPU-C-DP-UHR-U-DT
KVM extenders, Article number A1110311
Front

#### Back

The matrix-compatible KVM extenders of the VisionXS-DP-UHR 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-UHR series supports DisplayPort1.2 for ultrahigh-resolution video up to  $4096 \times 2160$  (60 Hz) or  $5120 \times 2160$  (50 Hz). Video data is processed pixel-perfectly and offers excellent hand-eye coordination, thanks to bluedec<sup>TM</sup> – G&D's advanced, multi-stage, lossless compression technology.

# **Scope of delivery**

Quantity	Description	Article number
1	PowerCable-2 Standard cable 2m	A6300057
1	DP1.4-Cable-M/M-2 SK13357 2m	A6300173
1	USB-AM/BM-2 cable USB 2m	A6300113

### **Details**

#### Video

- bluedec<sup>TM</sup> 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

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• Resolution up to

5120 × 2160 @ 50 Hz,

5120 × 1440 @ 60 Hz,

4096 × 2160 @ 60 Hz,

2560 × 1440 @ 144 Hz,

1920 × 1080 @ 240 Hz
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## **Signals**

- Embedded stereo audio (DisplayPort Digital, 2 channel LPCM, AC3, DTS, sampling rate up to 192 kHz)
- 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.
- Embedded USB 2.0 with Full Speed, transparent, all USB classes

#### **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
USB CPU	USB-B socket 2.0	Connection to computer - USB 2.0
DP CPU	DisplayPort socket	Connection to computer - Video

# Back

Aperture designation	Design	Description
Transmission 1	RJ45 socket	Data transmission to console module or matrix switch (CAT)
Transmission 2	RJ45 socket	Data transmission to console 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**

	Product group	KVM extenders
	Product Family	VisionXS
General	KVM matrix system component	Computer module (digital)
	Power Supply	Redundancy without load balancing
	Number of transmission channels	1
	Redundant transmission channels	optional redundant KVM transmission
Transmission	Range	140 m (AWG22) 100 m (AWG24) 80 m (AWG26)
	Medium	CAT5e CAT6 CAT7
	Data rate	1 Gbit/s

Quantity 1

DisplayPort 1.2 (LBR, HBR, HBR2, SingleStream-Format

Transport (SST))

Colour depth 24 bit

Pixel encoding RGB 4:4:4 (24 bpp / 8 bpc) Pixel rate ca. 25 MPixel/s to 600 MPixel/s

Vertical frequency 24 Hz to 240 Hz Horizontal frequency 25 kHz to 295 kHz

> 4096 × 2160 (60 Hz)  $3840 \times 2160 (60 \text{ Hz})$ 2560 × 1600 (60 Hz)

Video input

2560 × 1440 (144 Hz) 2048 × 2048 (60 Hz)

Exemplary resolutions 1920 × 1200 (60 Hz)

1920 × 1080 (240 Hz) 1920 × 1080 (60 Hz) 5120 × 1440 (60 Hz) 5120 × 2160 (50 Hz)

Further VESA and CTA standardised resolutions General Notes possible within pixel rate and horizontal/vertical

frequency.

Supported industry

standards

Display Data Channel Command Interface (DDC/CI)

Extended Display Identification Data (EDID)

2-channel LPCM

Stereo Transmission type DTS

AC3

Audio Resolutions 24 bit 20 bit

16 bit

Sampling rate up to 192 kHz Audio support Digital Embedded

Separate USB

no

transmission port Specification **USB 2.0** 

GenericUSB support 1 device

USB 1 Medium Embedded

> Transmission rate max. 25 Mbit/s (Full Speed)

Mass Storage (MSC / UMS)

**USB** classes Human Interface Device (HID)

SmartCard

Specification **USB 2.0** Medium Embedded

Transmission rate max. 16 Mbit/s (app. Full Speed) USB 2

Range max. 140 m

Power (output) 500 mA (HighPower)

**USB** classes All

	Quantity	1
Network	Medium	CAT5 CAT6 CAT7
	Data rate	10 Mbit/s 100 Mbit/s
Maintenance	Update via	ConfigPanel (Network)
Maintenance	Serviceport settings	115200bps (8/N/1)
	Material	anodised aluminium
	Width ca.	170 mm
Housing	Height ca.	40 mm
	Depth ca.	184 mm
	IP protection class	IP20
	Operating 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 temperature	-20 °C to 60 °C
Operating conditions	Storage air humidity, non-condensing	15 % to 85 %
Conditions	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)
	Quantity	1
	Type	External
	Input voltage	12 VDC
Power supply	Current consumption	1.4 A
1	Power consumption idle	11.84 W
	Power consumption max.	15.3 W
	Heat output idle	11.84 W
	Heat output max.	15.3 W
Power supply 2	Quantity	1
	Type	Internal
	Input voltage	100-240 VAC
	Input frequency	60-50 Hz
	Current consumption	0.35-0.2 A
	Power consumption idle	13.6-13.2 W

Power consumption max. 17.4-16.9 W Heat output idle 13.6-13.2 W Heat output max. 17.4-16.9 W

# more variants

Description	Article number
VisionXS-CPU-C-DP-UHR Computer module to extend DisplayPort1.2 signals via CAT cable	A1110304
VisionXS-CPU-C-DP-UHR-A Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-A-U Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-A-U2 Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-AR-DT Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-AR-U-DT Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-AR-U2-DT Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-DT Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-U Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-U2 Computer module to extend DisplayPort1.2 signals via CAT cable	
VisionXS-CPU-C-DP-UHR-U2-DT Computer module to extend DisplayPort1.2 signals via CAT cable	

# **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**

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