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G&D Product data sheet - 29. Oct 2025 DVI-Vision-CAT-ARU-CPU
DVI-Vision-CAT-ARU-CPU
KVM extenders, Article number A1110170
Front

Back

The matrix-compatible KVM extenders of the DVI-Vision 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 DVI-Vision series supports SingleLink DVI for digital video resolutions up to 1920×1200 (60 Hz). Video data is processed pixel-perfectly and offers excellent hand-eye coordination, thanks to bluedecTM – G&D's advanced, multi-stage, lossless compression technology.

Scope of delivery

Quantity	Description	Article number
1	PowerCable-2 Standard cable 2m	A6300057
1	DVI-D-DL-M/M-2 cable DVI-D 2m	A6300100
1	USB-AM/BM-2 cable USB 2m	A6300113
1	RS232-M/F-2 cable RS232 2m	A6300023
2	Audio-M/M-2-ferrite cable 2m	A6300083

Details

Video

- bluedecTM 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 1920 × 1200 @ 60 Hz, 1280 × 1024 @ 85 Hz
- Resolution up to 1920 × 1200 @ 60 Hz, 1280 × 1024 @ 85 Hz

Signals

- Transparent audio signals (stereo, analog)
- Transparent RS232 (max. 115,200 bps)
- 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
- 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)
- Internal power pack for main power supply
- CON-2 variant: console module with two transmission lines for redundancy
 - These modules can be connected to various counterparts, such as compatible computer modules or KVM matrix switches, whereby switching is carried out via pushbuttons, hotkeys or automatically, depending on the configuration
- UC variant: computer module with two transmission lines for redundancy
 - These modules can be connected to various counterparts, such as compatible console modules or KVM matrix switches
- 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

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

- 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
- 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.

Extensions

Device

• External power supply via external 12V power pack or G&D-MultiPower, providing a central and redundant power supply

• Device mounting via RackMount sets, TableMount sets or other mounting tools

System extension

• 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.

Interfaces

]	Front		
	Aperture designation	Design	Description

Aperture designation	Design	Description
Network	RJ45 socket	Network connection
Service	Mini USB socket	Connection for service purpose

Back

Aperture designation	Design	Description
Transmission	RJ45 socket	Data transmission between modules
DVI / VGA Out	DVI-I jack	Connecting a monitor
DVI-D CPU	DVI-D jack	Connection to the computer
Line In	3,5-mm jack plug	Connection to the computer
Line Out	3,5-mm jack plug	Connection to the computer
Keyb./Mouse	PS/2 jack	Connection of a keyboard / mouse
Keyb./Mouse	USB A socket	Connection of a keyboard / mouse
Keyb. CPU	PS/2 jack	Connection to the computer
Mouse CPU	PS/2 jack	Connection to the computer
RS232	D-Sub 9 socket	Serial data transmission
USB CPU	USB B socket	Connection to the computer
Red. Power	Mini DIN 4 socket	Redundant power supply
Main Power	IEC plug (IEC-320 C14)	Stromversorgung

Technical data

Input options

Product group **KVM** extenders

Product Family Vision

General KVM matrix system

component

Computer module (digital)

Redundancy without load balancing Power Supply

1

USB mouse yes USB keyboard yes

PS/2 mouse yes PS/2 keyboard yes

Number of transmission

channels

Redundant transmission

channels

no redundant KVM transmission

140 m (AWG22) 100 m (AWG24) **Transmission** Range

80 m (AWG26)

CAT5e Medium CAT6 CAT7

1 Gbit/s Data rate

1 Quantity

Format Singlelink DVI

Colour depth 24 bit

25 MHz to 165 MHz Pixel rate ca. Vertical frequency 24 Hz to 120 Hz Horizontal frequency 25 kHz to 130 kHz 1920 × 1200 (60 Hz)

1920 × 1080 (60 Hz) **Exemplary resolutions** 1600 × 1200 (60 Hz)

Video input

1280 × 1024 (85 Hz)

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

frequency.

1920 × 1080i (60 Hz)

Supported interlace 1920 × 1080i (50 Hz) resolutions 1440 × 576i (50 Hz) 1440 × 480i (60 Hz)

Only the listed interlace yes formats are supported

Quantity 1

Singlelink DVI **Format**

Video output Colour depth 24 bit

> Pixel rate ca. 25 MHz to 165 MHz Vertical frequency 24 Hz to 120 Hz

	Horizontal frequency	25 kHz to 130 kHz
	Exemplary resolutions	1920 × 1200 (60 Hz) 1920 × 1080 (60 Hz) 1600 × 1200 (60 Hz) 1280 × 1024 (85 Hz)
	General Notes	Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
	Supported interlace resolutions	1440 × 480i (60 Hz) 1440 × 576i (50 Hz) 1920 × 1080i (50 Hz) 1920 × 1080i (60 Hz)
	Only the listed interlace formats are supported	yes
	Transmission type	Stereo Transparent
Audio	Resolutions Sampling rate	24 bit digital up to 96 kHz
	Bandwidth	22 kHz
	Audio support	Analog
	Specification	USB 2.0
	Medium	Embedded
USB	Transmission rate	max. 16 Mbit/s (app. Full Speed)
002	Range	max. 140 m
	Power (output)	500 mA (HighPower)
	USB classes	All
	Standard	RS232
	Transparent transmission	yes
	Data rate	max. 115,200 bps
Serial	Signals	TxD RxD DTR DSR RTS CTS DCD
	Quantity	1
Network	Medium	CAT5 CAT6 CAT7
	Data rate	10 Mbit/s 100 Mbit/s
N/	Update via	ConfigPanel (Network)
Maintenance	Serviceport settings	115200bps (8/N/1)
	Material	anodised aluminium
Housing	Width ca.	210 mm

Height ca. 44 mm Depth ca. 210 mm IP protection class IP20 1.28 kg Weight ca.

Operating temperature 5 °C to 45 °C

Operating air humidity, non-

condensing

20 % to 80 %

Area of application Indoor use

Maximum operating altitude 3,048 m

above sea level

-20 °C to 60 °C Storage temperature

Operating conditions Storage air humidity, noncondensing

15 % to 85 %

MTBF 200,000 h at 25°C

> CE compliant (see downloads) UKCA compliant (see downloads) FCC compliant (see manual) TAA compliant (see downloads)

Conformities EAC compliant (see downloads) RoHS compliant (see downloads) WEEE (reg. no. DE30763240)

REACH compliant (see downloads)

Quantity 1

Type Internal

Input voltage 100-240 VAC

Power supply 1

Input frequency 60-50 Hz Current consumption 0.3 - 0.2 APower consumption max. 12.1 W Heat output max. 9.1 W

1 Quantity

Type External **Power supply** Input voltage 12 VDC

Current consumption 0.9 APower consumption max. 10.4 W Heat output max. 7.4 W

accessory products

Γ	Image	Description	Article number
		USB- Service-2 cable 2m Cable for system updates and configuration	A6200103
		PowerCable-3 Standard cable 3m Cable to connect the power supply type Germany	A6300066

Image	Description	Article number
	PowerCable-5 Standard cable 5m Cable to connect the power supply type Germany	A6300065
	Audio-M/ M-3-ferrite cable 3m Audio connection cable with ferrite core	A6300118
	Audio-M/ M-5-ferrite cable 5m Audio connection cable with ferrite core	A6300085

Image	Description	Article number
	DP1.4-Cable-M/M-3 SK13358 3m Single cable to connect a DisplayPort video channel (DP1.4)	A6300174
	DP1.4-Cable-M/M-5 SK13359 5m Single cable to connect a DisplayPort video channel (DP1.4)	A6300175
	RS232-M/F-3 cable RS232 3m Cable to connect a serial device	A6300024

Image	Description	Article number
	RS232-M/F-5 cable RS232 5m Cable to connect a serial device	A6300025
	USB-AM/ BM-3 cable USB 3m USB cable, Type-A Plug/ Type-B Plug	A6300114
	USB-AM/ BM-5 cable USB 5m USB cable, Type-A Plug/ Type-B Plug	A6300111

Image	Description	Article number
	PowerPack 12 Type 3 12V/2A 24W power supply with 2m powercable	A4110013
	19" RM- Set-210-1RU 19" extension for rack mounting devices of 210 mm width within 1RU (44 mm height)	A7000022

more variants

Description	Article number
DVI-Vision-CAT-AR-CPU Computer module to extend single link DVI signals via CAT cable	A1110167
DVI-Vision-CAT-AR-CPU-UC Splitter computer module for transmission of single link DVI signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A1110227
DVI-Vision-CAT-ARU-CPU-UC Splitter computer module for transmission of single link DVI signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A1110228
DVI-Vision-CAT-ARU2-CPU Computer module to extend single link DVI signals via CAT cable	A1110169

Description	Article number
DVI-Vision-CAT-MC2-AR-CPU	A1210172
Computer module to extend single link DVI signals via CAT cable	A12101/2
DVI-Vision-CAT-MC2-ARU-CPU	A1210175
Computer module to extend single link DVI signals via CAT cable	A12101/3
DVI-Vision-CAT-MC2-ARU2-CPU Computer module to extend single link DVI signals via CAT cable	A1210174
DVI-Vision-CAT-MC3-AR-CPU	A1310029
Computer module to extend single link DVI signals via CAT cable	
DVI-Vision-CAT-MC3-ARU-CPU Computer module to extend single link DVI signals via CAT cable	A1310031
DVI-Vision-CAT-MC3-ARU2-CPU	A 1010000
Computer module to extend single link DVI signals via CAT cable	A1310030
DVI-Vision-CAT-MC4-AR-CPU	A1410173
Computer module to extend single link DVI signals via CAT cable	A14101/3
DVI-Vision-CAT-MC4-ARU-CPU Computer module to extend single link DVI signals via CAT cable	A1410169
Computer module to extend single link DVI signals via CAT cable	
DVI-Vision-CAT-MC4-ARU2-CPU Computer module to extend single link DVI signals via CAT cable	A1410174

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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