

# DP-HR-CON-DH

KVM extenders, Article number A1120250



The matrix-compatible KVM extenders of the DP-HR-CON 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 DP-HR-CON 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

## 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)
- Use of a monitor profile optimized for the computer module (EDID profile)
- Flexible use of the EDID data of the workplace monitor as required
- Resolution up to  
2560 × 1600 @ 60 Hz,  
4096 × 2160 @ 30 Hz
- The DualHead variant (DH) allows the transmission of two separate video signals via one transmission cable. Both video channels support embedded audio.
  - Two-channel operation supports a guaranteed total pixel rate of up to 330MPixel/s.
  - The second video channel supports up to 165MPixel/s.
  - This corresponds, for example, to a resolution of up to  
1920 × 1200 @ 60 Hz,  
1920 × 1080 @ 60 Hz or  
1280 × 1024 @ 60 Hz.
  - If the resolution on the second video channel is lower, the main channel can transmit a higher resolution.
  - Exceeding the total pixel rate of 330MPixel/s may result in a loss of quality.

### SIGNALS

- Bidirectional audio signals (stereo)
- Embedded stereo audio (Digital, 2 channel LPCM)

### 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
- 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/guarantee renewal 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

### OPERATION FEATURES

- Ready for operation out of the box, no additional configuration required
- Operation via multilingual on-screen display (OSD) and hotkeys
- Compatibility with special USB-HID input devices
- 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 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.

## TECHNICAL DATA

General	Product group	KVM extenders KVM matrix systems
	Number of workstations	1
Input options	USB mouse	yes
	USB keyboard	yes
	PS/2 mouse	yes
	PS/2 keyboard	yes
Transmission	Number of transmission channels	1
	Redundant transmission channels	no redundant KVM transmission
	Range	140 m (AWG22) 100 m (AWG24) 80 m (AWG26)
	KVM matrix system component	Console module
	Medium	CAT5e CAT6 CAT7
	Data rate	1 Gbit/s
	Video output	Number of video channels
Max. total bandwidth DualHead		330 MPixel/s
Format		DisplayPort 1.1 (HBR)
Colour depth		24 bit
Pixel rate		ca. 25 MPixel/s to ca. 300 MPixel/s

	Vertical frequency	24 Hz to 120 Hz
	Horizontal frequency	25 kHz to 135 kHz
	Exemplary resolutions	4096 × 2160 (30 Hz) - 2K / WQXGA 4096 × 2160 (25 Hz) - 2K / WQXGA 4096 × 2160 (24 Hz) - 2K / WQXGA 3840 × 2160 (30 Hz) - 2K / WQXGA 3840 × 2160 (25 Hz) - 2K / WQXGA 3840 × 2160 (24 Hz) - 2K / WQXGA 2560 × 1600 (60 Hz) - 2K / WQXGA 2048 × 2048 (60 Hz) - 2K / WQXGA 1920 × 1200 (60 Hz) - Full HD / WUXGA 1920 × 1080 (60 Hz) - Full HD / WUXGA Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
	Supported industry standards	Display Data Channel Command Interface (DDC/CI) Display Data Channel (DDC) Extended Display Identification Data (EDID)
Video output 2	Number of video channels	2
	Max. total bandwidth DualHead	330 MPixel/s
	Format	DisplayPort 1.1
	Colour depth	24 bit
	Pixel rate	ca. 25 MPixel/s to ca. 165 MPixel/s
	Vertical frequency	24 Hz to 120 Hz
	Horizontal frequency	25 kHz to 135 kHz

	Exemplary resolutions	1920 × 1200 (60 Hz) - Full HD / WUXGA 1920 × 1080 (60 Hz) - Full HD / WUXGA 1280 × 1024 (85 Hz) - Full HD / WUXGA 640 × 480 (60 Hz) - Full HD / WUXGA 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	Transmission type	Bidirectional Stereo
	Resolutions	24 bit digital
	Sampling rate	up to 96 kHz
	Bandwidth	22 kHz
	Audio support	Analog
Audio 2	Transmission type	Stereo 2-channel LPCM
	Resolutions	24 bit 20 bit 16 bit
	Sampling rate	up to 48 kHz
	Audio support	Digital Embedded
Maintenance	Update via	Update Wizard (service interface)
	Serviceport settings	115200bps (8/N/1)
Housing	Material	anodised aluminium
	Width	ca. 210 mm

	Height	ca. 44 mm
	Depth	ca. 210 mm
	IP protection class	IP20
	Weight	ca. 1.25 kg
Operating conditions	Operating temperature	5 °C to 45 °C
	Operating air humidity	20 % to 80 %, non-condensing
	Area of application	Interior
	Maximum operating altitude	3000m above sea level
	Storage temperature	-20 °C to 60 °C
	Storage air humidity	15 % to 85 %, non-condensing
	Conformities	CE compliant (see downloads) UKCA 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)
Power supply	Input voltage	100-240 VAC
	Input frequency	60-50 Hz
	Current consumption	0.3-0.2 A
Power supply 2	Input voltage	12 VDC
	Current consumption	1.2 A

## MORE VARIANTS

Description	Article number
<b>DP-HR-CON</b> Console module to receive DisplayPort signals via CAT cable	A1120170
<b>DP-HR-CON-2</b> Redundant console module to receive DisplayPort signals of 2 sources via CAT cable	A1120220
<b>DP-HR-CON-2-DH</b> Redundant dual head console module (CAT cable) to receive DisplayPort signals of 2 sources including 2 video channels using 1 transmission line	A1120279
<b>DP-HR-CON-MC2</b> Console module to receive DisplayPort signals via CAT cable	A1120214
<b>DP-HR-U-CON</b> Console module to receive DisplayPort signals via CAT cable	A1120171
<b>DP-HR-U-CON-2</b> Redundant console module to receive DisplayPort signals of 2 sources via CAT cable	A1120217
<b>DP-HR-U-CON-2-DH</b> Redundant dual head console module (CAT cable) to receive DisplayPort signals of 2 sources including 2 video channels using 1 transmission line	A1120275
<b>DP-HR-U-CON-DH</b> Dual head console module (CAT cable) to receive DisplayPort signals of 1 source including 2 video channels using 1 transmission line	A1120246
<b>DP-HR-U-CON-MC2</b> Console module to receive DisplayPort signals via CAT cable	A1120218



# 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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