

DP-U-CPU 4.0 BASIC

KVM extenders, Article number A2320499



The matrix-compatible KVM extenders of the DP-CPU series extend keyboard, video, and mouse signals, as well as other peripheral data (e.g., audio and USB), via a dedicated CAT connection (up to 140 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-CPU series supports DisplayPort1.1 DualMode (DP++) for video resolutions up to 1920 x 1200 (60 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	USB-AM/BM-2 cable USB 2m	A6300113
1	DP1.4-Cable-M/M-2 SK13357 2m	A6300173
2	Audio-M/M-2-ferrite cable 2m	A6300083
1	Safety instructions flyer - FCC class B	A9100371

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
- Use of the VESA DisplayPort DualMode standard version 1.1 (extension to the DisplayPort 1.1a standard)
- For correct operation, the DisplayPort source also needs to support the DualMode standard (often marked with DP++)
- Resolution up to 1920 × 1200 @ 60 Hz

SIGNALS

- Bidirectional audio signals (stereo)
- 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)
- PowerPack not included in the scope of delivery for Basic variants
- 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

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
- 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
	Product Family	MTX-CPU/CON
	Number of sources	1
	KVM matrix system component	Computer module (digital)
	Power Supply	no redundancy
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)
	Medium	CAT5e CAT6 CAT7
	Data rate	1 Gbit/s
Video input	Quantity	1
	Format	DisplayPort 1.1 (DualMode)
	Colour depth	24 bit

	Pixel rate ca.	25 MPixel/s to 165 MPixel/s
	Vertical frequency	50 Hz to 180 Hz
	Horizontal frequency	30 kHz to 130 kHz
	Exemplary resolutions	1920 × 1200 (60 Hz) 1920 × 1080 (60 Hz) 1600 × 1200 (60 Hz)
	General Notes	Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.
	Supported industry standards	Display Data Channel (DDC) Display Data Channel Command Interface (DDC/CI)
Audio	Transmission type	Bidirectional Stereo
	Resolutions	24 bit digital
	Sampling rate	up to 96 kHz
	Bandwidth	22 kHz
	Audio support	Analog
USB	Specification	USB 2.0
	Medium	Embedded
	Transmission rate	max. 16 Mbit/s (app. Full Speed)
	Range	max. 140 m
	Power (output)	500 mA (HighPower)
	USB classes	All

Maintenance	Update via	Update Wizard (service interface)
	Serviceport settings	115200bps (8/N/1)
Housing	Material	anodised aluminium
	Width ca.	105 mm
	Height ca.	26 mm
	Depth ca.	104 mm
	IP protection class	IP20
Operating conditions	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
	Storage air humidity, non-condensing	15 % to 85 %
	MTBF	280,000 h at 25°C
	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	Quantity	1



	Type	External
	Input voltage	12 VDC
	Current consumption	0.5 A

ACCESSORY PRODUCTS

Image	Description	Article number
	USB-Service-2 cable 2m Cable for system updates and configuration	A6200103
	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
	DP-Cable-M/M-3 cable DP 3m Single cable to connect a DisplayPort video channel	A6300109
	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
	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
	PowerPack 12 Type 3 12V/2A 24W power supply with 2m powercable	A4110013
	CaseMount-Set-105-26 mounting bracket Screws & brackets for mounting devices with dimensions 105x26mm in DeviceCarriers	A7000020

MORE VARIANTS

Description	Article number
DP-CPU 2.0 Basic Computer module to extend DisplayPort signals via CAT cable	A2320081
DP-CPU 2.0 Incl. PowerPack Computer module to extend DisplayPort signals via CAT cable	A2320078
DP-CPU 4.0 Basic Computer module to extend DisplayPort signals via CAT cable	A2320495
DP-CPU 4.0 Incl. Powerpack Computer module to extend DisplayPort signals via CAT cable	A2320496
DP-CPU-UC 2.0 Basic Computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320080
DP-CPU-UC 2.0 Incl. PowerPack Computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320079
DP-CPU-UC 4.0 Basic Computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320497
DP-CPU-UC 4.0 Incl. Powerpack Computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320498
DP-U-CPU 4.0 Incl. Powerpack Computer module to extend DisplayPort signals via CAT cable	A2320500
DP-U-CPU Basic Computer module to extend DisplayPort signals via CAT cable	A2320122
DP-U-CPU Incl. PowerPack Computer module to extend DisplayPort signals via CAT cable	A2320121
DP-U-CPU-UC 4.0 Basic Computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320501
DP-U-CPU-UC 4.0 Incl. Powerpack Computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320502

Description	Article number
DP-U-CPU-UC Basic Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320124
DP-U-CPU-UC incl. PowerPack Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via CAT cable	A2320123

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

Tel.: +1-833-928-1976
Fax: +1-833-928-1976
E-Mail: sales.us@gdsys.com

HEADQUARTERS

Guntermann & Drunck GmbH Systementwicklung
Obere Leimbach 9 | 57074 Siegen | NRW |
Deutschland

Tel.: +49 271 23872-0
Fax: +49 271 23872-120
E-Mail: sales@gdsys.com

US OFFICE

G&D North America Inc.
4540 Kendrick Plaza Drive | Suite 100
Houston, TX 77032 | United States

Tel.: +1-346-620-4362
E-Mail: sales.us@gdsys.com

MIDDLE EAST OFFICE

Guntermann & Drunck GmbH
Dubai Studio City | DSC Tower
12th Floor, Office 1208 | Dubai, UAE

Tel.: +971 4 5586178
E-Mail: sales.me@gdsys.com

APAC OFFICE

Guntermann & Drunck GmbH
60 Anson Road #17-01
Singapore 079914

Tel.: +65 9685 8807
E-Mail: sales.apac@gdsys.com