# DP-HR-CPU-FIBER(M)-MC2 BASIC

KVM extenders, Article number A2320164

Front

Back

The matrix-compatible KVM extenders of the DP-HR-CPU 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-CPU series supports DisplayPort 1.1 for high-resolution video up to 2560 × 1600 (60 Hz) or 4096 × 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.

# 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

## SIGNALS

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

## TRANSMISSION

- The transmission distance is up to 400 meters over fiber multimode optics, incl. transmission module(s)/SFP transceiver(s)

## 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 extensioin/guarantee renewal 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<br>KVM matrix systems |
| | Number of sources | 1 |
| Input options | USB mouse | yes |
| | USB keyboard | yes |
| | PS/2 mouse | yes |
| | PS/2 keyboard | yes |
| Transmission | Number of transmission channels | 2 |
| | Redundant transmission channels | no redundant KVM transmission |
| | Range | 100 m (62.5/125µm)<br>200 m (50.0/125µm, OM2)<br>400 m (50.0/125µm, OM3)<br>70 m (62.5/125µm)<br>150 m (50.0/125µm)<br>400 m (50.0/125µm, OM4 - 4700MHz*km) |
| | Laser class | Class 1 |
| | Type of interface | LC-Duplex |
| | Wavelength | 850 nm |
| | KVM matrix system component | Computer module |
| | Medium | Fiber MM |
| | Data rate | 2.5 Gbit/s |
| Video input | Number of video channels | 2 |

| | | |
|---|---|---|
| | Format | DisplayPort 1.1<br>(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 (24 Hz)<br>4096 × 2160 (25 Hz)<br>2048 × 2048 (60 Hz)<br>4096 × 2160 (30 Hz)<br>3840 × 2160 (24 Hz)<br>3840 × 2160 (25 Hz)<br>3840 × 2160 (30 Hz)<br>2560 × 1600 (60 Hz)<br>1920 × 1200 (60 Hz)<br>1920 × 1080 (60 Hz)<br>Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency. |
| | Supported industry standards | Display Data Channel (DDC)<br>Display Data Channel Command Interface (DDC/CI)<br>Extended Display Identification Data (EDID) |
| Audio | Transmission type | Bidirectional<br>Stereo |
| | Resolutions | 24 bit digital |
| | Sampling rate | up to 96 kHz |
| | Bandwidth | 22 kHz |
| | Audio support | Analog |

| | | |
|---|---|---|
| Audio 2 | Transmission type | Stereo<br>2-channel LPCM |
| | Resolutions | 24 bit<br>20 bit<br>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. 105 mm |
| | Height | ca. 46 mm |
| | Depth | ca. 164 mm |
| | IP protection class | IP20 |
| | Weight | ca. 0.60 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 | 3048m above sea level |
| | Storage temperature | -20 °C to 60 °C |
| | Storage air humidity | 15 % to 85 %, non-condensing |
| | MTBF | 260000 h at 25°C |

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|---|---|---|
| | Conformities | CE compliant (see downloads)<br>UKCA compliant (see downloads)<br>FCC compliant (see manual)<br>TAA compliant (see downloads)<br>EAC compliant (see downloads)<br>RoHS compliant (see downloads)<br>WEEE (reg. no. DE30763240)<br>REACH compliant (see downloads) |
| Power supply | Input voltage | 12 VDC |
| | Current consumption | 1.1 A |
| | Power consumption max. | 10.6 W |
| | Heat output max. | 11.6 W |

# MORE VARIANTS

| Description | Article number |
|---|---|
| **DP-HR-CPU-Fiber(M) 3.0 Basic**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320413 |
| **DP-HR-CPU-Fiber(M) 3.0 incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320414 |
| **DP-HR-CPU-Fiber(M) Basic**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320266 |
| **DP-HR-CPU-Fiber(M) incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320130 |
| **DP-HR-CPU-Fiber(M)-DH 3.0 Basic**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320415 |
| **DP-HR-CPU-Fiber(M)-DH 3.0 incl. PowerPack**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320416 |
| **DP-HR-CPU-Fiber(M)-DH Basic**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320200 |
| **DP-HR-CPU-Fiber(M)-DH incl. PowerPack**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320199 |
| **DP-HR-CPU-Fiber(M)-DH-UC 3.0 Basic**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320417 |
| **DP-HR-CPU-Fiber(M)-DH-UC 3.0 incl. PowerPack**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320418 |
| **DP-HR-CPU-Fiber(M)-DH-UC Basic**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320209 |
| **DP-HR-CPU-Fiber(M)-DH-UC incl. PowerPack**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320201 |
| **DP-HR-CPU-Fiber(M)-MC2 3.0 Basic**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320419 |

| Description | Article number |
|---|---|
| **DP-HR-CPU-Fiber(M)-MC2 3.0 incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320420 |
| **DP-HR-CPU-Fiber(M)-MC2 incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320163 |
| **DP-HR-CPU-Fiber(M)-UC 3.0 Basic**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320421 |
| **DP-HR-CPU-Fiber(M)-UC 3.0 incl. PowerPack**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320422 |
| **DP-HR-CPU-Fiber(M)-UC Basic**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320267 |
| **DP-HR-CPU-Fiber(M)-UC incl. PowerPack**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320138 |
| **DP-HR-U-CPU-Fiber(M) 3.0 Basic**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320453 |
| **DP-HR-U-CPU-Fiber(M) 3.0 incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320454 |
| **DP-HR-U-CPU-Fiber(M) Basic**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320272 |
| **DP-HR-U-CPU-Fiber(M) incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320127 |
| **DP-HR-U-CPU-Fiber(M)-DH 3.0 Basic**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320455 |
| **DP-HR-U-CPU-Fiber(M)-DH 3.0 incl. PowerPack**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320456 |
| **DP-HR-U-CPU-Fiber(M)-DH Basic**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320183 |
| **DP-HR-U-CPU-Fiber(M)-DH incl. PowerPack**<br>Dual head computer module (fiber multimode) to extend 2 DisplayPort signals using 1 transmission line | A2320182 |

| Description | Article number |
|---|---|
| **DP-HR-U-CPU-Fiber(M)-DH-UC 3.0 Basic**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320457 |
| **DP-HR-U-CPU-Fiber(M)-DH-UC 3.0 incl. PowerPack**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320458 |
| **DP-HR-U-CPU-Fiber(M)-DH-UC Basic**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320185 |
| **DP-HR-U-CPU-Fiber(M)-DH-UC incl. PowerPack**<br>Dual head splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320184 |
| **DP-HR-U-CPU-Fiber(M)-MC2 3.0 Basic**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320459 |
| **DP-HR-U-CPU-Fiber(M)-MC2 3.0 incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320460 |
| **DP-HR-U-CPU-Fiber(M)-MC2 Basic**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320172 |
| **DP-HR-U-CPU-Fiber(M)-MC2 incl. PowerPack**<br>Computer module to extend DisplayPort signals via fiber multimode | A2320171 |
| **DP-HR-U-CPU-Fiber(M)-UC 3.0 Basic**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320461 |
| **DP-HR-U-CPU-Fiber(M)-UC 3.0 incl. PowerPack**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320462 |
| **DP-HR-U-CPU-Fiber(M)-UC Basic**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320273 |
| **DP-HR-U-CPU-Fiber(M)-UC incl. PowerPack**<br>Splitter computer module for transmission of DisplayPort signals to 2 different counterpart stations (extenders or matrix switches) via fiber multimode | A2320133 |

# 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.: +49 271 23872-333
Fax: +49 271 23872-120
E-Mail: sales@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