

# DP1.4-MUX4-NT

KVM switches, Article number A2100216



The KVM switch DP1.4-MUX4-NT lets you operate up to four computers with DisplayPort 1.4 via one workplace. Switching between computers is done either via the push buttons on the front panel, configurable key combinations, the integrated EasyControl tool, XML remote control via API and SNMP, or an additional serial device via the RS232 interface. You can use various Monitoring & SNMP features via the network interfaces. These can also be used to configure the device via the Config Panel.

## SCOPE OF DELIVERY

| Quantity | Description                             | Article number |
|----------|-----------------------------------------|----------------|
| 2        | PowerCable-2 Standard cable 2m          | A6300057       |
| 1        | 19" RM-Set-436-1RU                      | A7000003       |
| 1        | Safety instructions flyer - FCC class B | A9100371       |

## DETAILS

### VIDEO

- EDID data utilization from the workplace monitor
- Resolution up to  
7680 × 4320 @ 30 Hz,  
5120 × 2880 @ 60 Hz,  
2560 × 1440 @ 144 Hz,  
1920 × 1080 @ 240 Hz
- Resolution up to  
7680 × 4320 @ 30 Hz,  
5120 × 2880 @ 60 Hz,  
2560 × 1440 @ 144 Hz,  
1920 × 1080 @ 240 Hz

### SIGNALS

- Embedded stereo audio (DisplayPort Digital, LPCM 2/4/6/8 channels)
- Transparent audio signals (stereo, analog)
- USB 3.1 gen1 with SuperSpeed, all USB classes

### DEVICE

- Access to standard interfaces of the computer, with no software installation required
- MultiChannel variants (MC): Modules for multi-monitor workplaces with multi-channel video

### WARRANTY

- A 3-year, free of charge product guarantee
- For an additional fee guarantee extension possible

## FEATURES

### SECURITY FEATURES

- Monitoring of system states such as status, power supply, temperature and computer modules and console modules are monitored as well
- Each monitoring value can be enabled individually; critical states raise an alarm, which authorized users can acknowledge to downgrade it to warning level
- Syslog logging locally and to up to two servers, via TCP or UDP, with configurable port, eight severity levels per the syslog standard and ISO 8601 timestamps
- Logged events include user logins, failed login attempts, changes to user rights, connections to remote targets and failed backups
- SNMP agent supporting SNMPv2c and SNMPv3; for SNMPv3, authentication via SHA-1 through SHA-512, encryption with AES128, AES192 or AES256, and security levels up to authPriv
- Access to the SNMP agent can be restricted to defined source IP addresses or network segments (IPv4 and IPv6)
- SNMP notifications to multiple receivers, sent either as traps or as acknowledged informs, with a configurable severity threshold
- Redundant network interface
- Redundant internal power packs
- Auto Backup Function: Automates backups at user-defined intervals and replaces manual intervention – ensuring reliable, timely data protection without the need for continuous monitoring
- 2-Factor-Authentication (2FA) – is integrated by default in MUX-NT series 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
- Configuration and update via the multilingual HTML5 web interface “Config Panel 21” (Java-free)

## EXTENSIONS

### CONTROL OPTIONS

- With the OperatorPanel, you can switch your KVM switch comfortably from your desk by pressing a button. Now you can install the switch anywhere to save space.

## TECHNICAL DATA

|             |                      |                                                                                                                                     |
|-------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| General     | Brand                | G&D                                                                                                                                 |
|             | Product group        | KVM switches                                                                                                                        |
|             | Product Family       | MUX-NT                                                                                                                              |
|             | Country of origin    | Germany                                                                                                                             |
|             | Number of workplaces | 1                                                                                                                                   |
|             | Number of sources    | 4                                                                                                                                   |
|             | Power Supply         | Redundancy without load balancing                                                                                                   |
| Video input | Quantity             | 4                                                                                                                                   |
|             | Format               | DisplayPort 1.4 (LBR, HBR, HBR2, HBR3, SingleStream-Transport (SST), MultiStream-Transport (MST), Display Stream Compression (DSC)) |
|             | Colour depth         | 24 bit                                                                                                                              |
|             | Pixel encoding       | RGB 4:4:4 (24 bpp / 8 bpc)                                                                                                          |
|             | Pixel rate ca.       | 25 MPixel/s to 1080 MPixel/s                                                                                                        |
|             | Vertical frequency   | 20 Hz to 240 Hz                                                                                                                     |
|             | Horizontal frequency | 25 kHz to 390 kHz                                                                                                                   |

|              |                              |                                                                                                                                                                                                                                                                                      |
|--------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | Exemplary resolutions        | 7680 × 4320 (30 Hz)<br>5120 × 2880 (60 Hz)<br>4096 × 2160 (60 Hz)<br>3840 × 2160 (120 Hz)<br>3840 × 2160 (60 Hz)<br>2560 × 1600 (60 Hz)<br>2560 × 1440 (240 Hz)<br>2560 × 1440 (144 Hz)<br>2048 × 2048 (60 Hz)<br>1920 × 1200 (60 Hz)<br>1920 × 1080 (240 Hz)<br>1920 × 1080 (60 Hz) |
|              | General Notes                | Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.                                                                                                                                                                          |
|              | Supported industry standards | Extended Display Identification Data (EDID)<br>Display Data Channel Command Interface (DDC/CI)<br>Display Data Channel (DDC)                                                                                                                                                         |
| Video output | Quantity                     | 1                                                                                                                                                                                                                                                                                    |
|              | Format                       | DisplayPort 1.4 (LBR, HBR, HBR2, HBR3, SingleStream-Transport (SST), MultiStream-Transport (MST), Display Stream Compression (DSC))                                                                                                                                                  |
|              | Colour depth                 | 24 bit                                                                                                                                                                                                                                                                               |
|              | Pixel encoding               | RGB 4:4:4 (24 bpp / 8 bpc)                                                                                                                                                                                                                                                           |
|              | Pixel rate ca.               | 25 MPixel/s to 1080 MPixel/s                                                                                                                                                                                                                                                         |
|              | Vertical frequency           | 20 Hz to 240 Hz                                                                                                                                                                                                                                                                      |
|              | Horizontal frequency         | 25 kHz to 390 kHz                                                                                                                                                                                                                                                                    |

|         |                              |                                                                                                                                                                                                                                                                                      |
|---------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Exemplary resolutions        | 7680 × 4320 (30 Hz)<br>5120 × 2880 (60 Hz)<br>4096 × 2160 (60 Hz)<br>3840 × 2160 (120 Hz)<br>3840 × 2160 (60 Hz)<br>2560 × 1600 (60 Hz)<br>2560 × 1440 (240 Hz)<br>2560 × 1440 (144 Hz)<br>2048 × 2048 (60 Hz)<br>1920 × 1200 (60 Hz)<br>1920 × 1080 (240 Hz)<br>1920 × 1080 (60 Hz) |
|         | General Notes                | Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency.                                                                                                                                                                          |
|         | Supported industry standards | Extended Display Identification Data (EDID)<br>Display Data Channel Command Interface (DDC/CI)<br>Display Data Channel (DDC)                                                                                                                                                         |
| Audio 1 | Transmission type            | LPCM (2/4/6/8 channels)<br>Stereo                                                                                                                                                                                                                                                    |
|         | Resolutions                  | 24 bit<br>20 bit<br>16 bit                                                                                                                                                                                                                                                           |
|         | Sampling rate                | up to 32 kHz<br>up to 44.1 kHz<br>up to 48 kHz<br>up to 88.2 kHz<br>up to 96 kHz<br>up to 176.4 kHz<br>up to 192 kHz                                                                                                                                                                 |
|         | Audio support                | Digital Embedded                                                                                                                                                                                                                                                                     |
| Audio 2 | Transmission type            | Stereo<br>Transparent                                                                                                                                                                                                                                                                |
|         | Resolutions                  | 24 bit digital                                                                                                                                                                                                                                                                       |

|             |                                |                                |
|-------------|--------------------------------|--------------------------------|
|             | Sampling rate                  | up to 96 kHz                   |
|             | Bandwidth                      | 22 kHz                         |
|             | Audio support                  | Analog                         |
| USB         | Separate USB transmission port | no                             |
|             | Specification                  | USB 3.1 Gen 1                  |
|             | Transmission rate              | max. 5,000 Mbit/s (SuperSpeed) |
|             | Power (output)                 | 900 mA (HighPower)             |
|             | USB classes                    | All                            |
| Network     | Quantity                       | 2                              |
|             | Medium                         | CAT7<br>CAT6<br>CAT5           |
|             | Data rate                      | 100 Mbit/s<br>10 Mbit/s        |
| Maintenance | Update via                     | ConfigPanel (Network)          |
|             | Serviceport settings           | 115200bps (8/N/1)              |
| Housing     | Material                       | Anodised aluminium             |
|             | Active cooling (fan)           | no                             |
|             | Width ca.                      | 436 mm                         |
|             | Height ca.                     | 44 mm                          |
|             | Depth ca.                      | 210 mm                         |
|             | IP protection class            | IP20                           |

|                      |                                            |                                                                                                                                                                                                                                                                   |
|----------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating conditions | Operating environment 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 environment temperature            | -20 °C to 55 °C                                                                                                                                                                                                                                                   |
|                      | Storage air humidity, non-condensing       | 15 % to 85 %                                                                                                                                                                                                                                                      |
|                      | MTBF                                       | 200,000 h at 25°C                                                                                                                                                                                                                                                 |
|                      | 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         | Quantity                                   | 2                                                                                                                                                                                                                                                                 |
|                      | Type                                       | Internal                                                                                                                                                                                                                                                          |
|                      | Input voltage                              | 100-240 VAC                                                                                                                                                                                                                                                       |
|                      | Input frequency                            | 60-50 Hz                                                                                                                                                                                                                                                          |
|                      | Current consumption                        | 0.6-0.4 A                                                                                                                                                                                                                                                         |
|                      | Heat output max.                           | 10-9 W / 34.12-30.71 BTU/h                                                                                                                                                                                                                                        |

## ACCESSORY PRODUCTS

| Image                                                                               | Description                                                                                                               | Article number |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------|
|    | <b>USB-Service-2 cable 2m</b><br>Cable for system updates and configuration                                               | A6200103       |
|    | <b>CPU-DP-U3-2 cable DP 2m</b><br>Cable set to connect a computer via its DP, audio, PS/2, USB 2.0 and USB 3.0 interfaces | A6100182       |
|    | <b>CPU-DP-U-2 cable connection-DPMux</b><br>Cable set to connect a computer via its DisplayPort, audio and USB interfaces | A6100164       |
|    | <b>PowerCable-3 Standard cable 3m</b><br>Cable to connect the power supply type Germany                                   | A6300066       |
|   | <b>PowerCable-5 Standard cable 5m</b><br>Cable to connect the power supply type Germany                                   | A6300065       |
|  | <b>Audio-M/M-2-ferrite cable 2m</b><br>Audio connection cable with ferrite core                                           | A6300083       |
|  | <b>Audio-M/M-3-ferrite cable 3m</b><br>Audio connection cable with ferrite core                                           | A6300118       |
|  | <b>Audio-M/M-5-ferrite cable 5m</b><br>Audio connection cable with ferrite core                                           | A6300085       |
|  | <b>DP1.4-Cable-M/M-2 SK13357 2m</b><br>Single cable to connect a DisplayPort video channel (DP1.4)                        | A6300173       |
|  | <b>DP1.4-Cable-M/M-3 SK13358 3m</b><br>Single cable to connect a DisplayPort video channel (DP1.4)                        | A6300174       |
|  | <b>DP1.4-Cable-M/M-5 SK13359 5m</b><br>Single cable to connect a DisplayPort video channel (DP1.4)                        | A6300175       |
|  | <b>USB-AM/BM-2 cable USB 2m</b><br>USB cable, Type-A Plug/Type-B Plug                                                     | A6300113       |
|  | <b>USB-AM/BM-3 cable USB 3m</b><br>USB cable, Type-A Plug/Type-B Plug                                                     | A6300114       |
|  | <b>USB-AM/BM-5 cable USB 5m</b><br>USB cable, Type-A Plug/Type-B Plug                                                     | A6300111       |

| Image                                                                             | Description                                                                    | Article number |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------|
|  | <b>USB3.0-AM/BM-1 cable USB3.0 1m</b><br>USB3.0 cable, Type-A Plug/Type-B Plug | A6300144       |
|  | <b>USB3.0-AM/BM-2 cable USB3.0 2m</b><br>USB3.0 cable, Type-A Plug/Type-B Plug | A6300145       |
|  | <b>USB3.0-AM/BM-3 cable USB3.0 3m</b><br>USB3.0 cable, Type-A Plug/Type-B Plug | A6300146       |

## MORE VARIANTS

| Description                                                                                                           | Article number |
|-----------------------------------------------------------------------------------------------------------------------|----------------|
| <b>DP1.4-MUX4-NT-MC2</b><br>KVM switch to operate 4 computers with 2 DisplayPort1.4 interfaces each via one console   | A2100215       |
| <b>DP1.4-MUX4-NT-MC2-R</b><br>KVM switch to operate 4 computers with 2 DisplayPort1.4 interfaces each via one console | A2100217       |
| <b>DP1.4-MUX4-NT-R</b><br>KVM switch to operate 4 computers with DisplayPort1.4 interface via one console             | A2100218       |

# 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@panoptec.com](mailto:sales@panoptec.com)

### HEADQUARTERS

Panoptec Europe GmbH  
Obere Leimbach 9 | 57074 Siegen | NRW |  
Deutschland

Tel.: +49 271 23872-0  
Fax: +49 271 23872-120  
E-Mail: [sales@panoptec.com](mailto:sales@panoptec.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](mailto:sales.us@gdsys.com)

### MIDDLE EAST OFFICE

Panoptec Europe GmbH  
Dubai Studio City | DSC Tower  
12th Floor, Office 1208 | Dubai, UAE

Tel.: +971 4 5586178  
E-Mail: [sales@panoptec.com](mailto:sales@panoptec.com)

### APAC OFFICE

Panoptec Europe GmbH  
60 Anson Road #17-01  
Singapore 079914

Tel.: +65 9685 8807  
E-Mail: [sales@panoptec.com](mailto:sales@panoptec.com)