



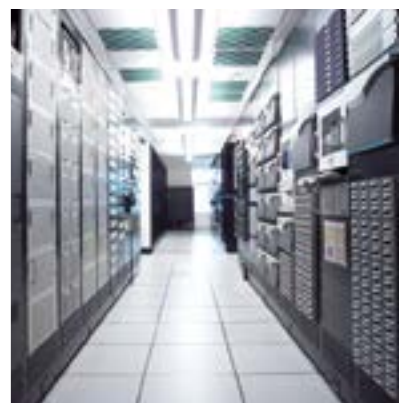
## DP KVM switches

## DP1.2-MUX3-ATC

### KVM switches

Switches for the effective operation of multiple computers via one workstation

Catalogue  
V2.1



G&D IF IT'S KVM



The company

Experience the whole world of

KVM

## G&D IF IT'S KVM

Guntermann & Drunk is regarded as a leading manufacturer of KVM equipment used in control rooms in air traffic control, broadcast studios, on ships and to monitor industrial processes.

With a powerful portfolio consisting of KVM extenders, switches and matrix switches, G&D's users get real added value. G&D provides the broadest KVM product portfolio at the market. Even with different features, all G&D products are compatible and can be combined. Our KVM solutions optimise the application of IT equipment and improve the working conditions for humans and computers.

No matter where KVM devices are installed, there's always one main requirement - robust, reliable, user-friendly and easy to operate KVM systems that can be adapted to future requirements and grow with your demands.

By short lines of communication G&D is able to solve challenging requirements and tailor systems to our customers' needs. We keep direct contact to our customers and are personally available. We are proactive and always keep an eye on the trends in the industry. Functionalities required by our customers are quickly implemented into our products. Our success can only be measured with our customers' satisfaction.

Trust in G&D for your optimal KVM solution.

**DP1.2-MUX3-ATC - The KVM switch with Instant switching technology and native 4K UltraHD support**

The KVM switch **DP1.2-MUX3-ATC** switches the signals

- DisplayPort™ 1.2a and 1.1a
- Keyboard/mouse
- Audio (analog and embedded)
- USB 3.0 transparent

The KVM switch DP1.2-MUX3-ATC enables you to operate up to three computers via one console.

The console is provided with a USB keyboard, a USB mouse and a DisplayPort™ monitor. The computers connected to the KVM switch are operated from the installed console.

Thanks to the newly developed instant switching technology the switching process between computers is done in real time and takes place either via the push buttons on the front panel, configurable key combinations, or a serial device which is connected to the Service- or RS232 port.

The front panel of the device provides two USB 3.0 interfaces to operate any USB devices. The connected USB devices are available to whichever active computer.

The KVM switch emulates keyboard and mouse on each channel and hence guarantees error-free booting at all times.



DP1.2-MUX3-ATC-MC2 – Front view



DP1.2-MUX3-ATC-MC2 – Rear view

## Details

### Video

- Supports DisplayPort™ 1.2a (backward compatible)
- Support of 4K and ultra HD resolutions at 60 Hz
- 24 bit colour depth, color subsampling 4:4:4
- Resolutions up to 4096x2160@60Hz (4K@60Hz)  
Further VESA and CEA standardized resolutions within the pixel rate (25 MP/s - 600 MP/s) and frame rate between 20 Hz and 240 Hz possible
- Processing is uncompressed, pixel perfect, absolutely lossless, zero latency (zero delay), no frame drops, no tearing, perfect hand-eye coordination
- Instant switching of DP1.2 signals using unique G&D technology
- E-EDID support

### Exemplary resolutions:

- 4096 × 2160 @ 60 Hz (4K/60 Hz)
- 3840 × 2160 @ 60 Hz (Ultra HD/60 Hz)
- 2560 × 1600 @ 60 Hz
- 2560 × 1440 @ 144 Hz
- 1920 × 1200 @ 60 Hz
- 1920 × 1080 @ 240 Hz
- 2048 × 2048 @ 60 Hz (2K x 2K)

### Operation

- Use especially in mission-critical areas
- One user operates three computers
- User-friendly switching via hotkey, SNMP, device button, OSD, web interface including G&D EasyControl GUI, IP Control or an external serial device
- Web interface for configuration, monitoring and updates
- DDC/CI support
- Freeze function
- Permanent keyboard and mouse emulation
- Permanent monitor emulation

## Details

### Device

- 2 network interfaces
- Suitable for all operating systems
- Instant switching
- Redundant power supply
- Hot-pluggable
- Ident LED to quickly find devices in complex installations
- Aluminium housing for best interference resistance
- Ventilation concept for the use in cold/hot aisle installations
- High reliability

### Signals

- DisplayPort™ 1.2a (backward compatible)
- Embedded audio in DisplayPort and analog bidirectional stereo audio
- Keyboard/mouse
- USB 3.0 transparent

### System upgrade

- Firmware upgrade in the webinterface

## Features

### Monitoring

The monitoring function allows the automatic output and query of device status messages via SNMP, output to syslog server and manual monitoring in the integrated web interface.

#### The monitoring function of the DP1.2-MUX3-ATC provides the following values:

- Object details according to RFC1213 of SNMP agents
- Device ID
- System identifier of the device
- Type of device
- Serial number
- MAC address of the first Ethernet interface
- MAC address of the second Ethernet interface
- Firmware version
- Error code and description
- Status of power supply unit (on/off)
- Power/voltage monitoring
- Status temperature threshold device (in/over limit)
- Status connection cables (ok/nok)
- Status computer (on/off)
- Status image signal (available/not available)
- Status network
- Fan monitoring
- Interface status sources and console
- Freeze status
- Monitor type
- Number of the connected channel
- Proactive monitoring of device states possible
- Event reporting function (syslog or SNMP traps)

### Configuration options via SNMP:

Activate/deactivate channel switching (general or individual for all individual switching options such as device button, hotkey, serial, SNMP, API, IP control).

### Screen freeze function

In the event of a defect of the sources causing the video signal to fail, the Screen Freeze function „freezes“ the last displayed image on the monitor. This state can be illustrated via a configuration option with a red, semi-transparent frame marker and a timer overlay. The function is automatically cancelled as soon as an active video signal is available again.

## Variants

### Design

- Available as desktop (DT) or rack mount (RM) variant

### Peripheral connections

- Available for USB connections

### Video channels

- Single-channel
- Multi-channel 2

## Installation

Connect the computers to the back side of the device. Distinctive standard cables connect keyboard, mouse, audio and USB interfaces to the switch.

For connecting the user console simply link keyboard, monitor, mouse, speakers and USB devices to the intended interfaces.

## DP1.2-MUX3-ATC



DP1.2-MUX3-ATC – Front view



DP1.2-MUX3-ATC – Rear view

### DP1.2-MUX3-ATC series

General features	
Number of video sources	
Per computer/workstation:	See variant features
Workstation	
Connectors per device:	1
Connection:	Directly on the device
Interfaces for workstation	
Video:	See variant features
PS/2 keyboard/mouse:	1 × PS/2 socket (Adapter for additional PS/2 interface available)
USB keyboard/mouse:	2 × USB A socket
USB 3.0 devices:	2 × USB A socket
Audio:	1 × 3.5 mm jack plug (speakers) 1 × Cinch (RCA) socket (Dig. Audio Out)
External switch:	1 × RS232 socket
Computer	
Connectors per device:	3
Connection:	With optional cable sets on the device
Interfaces per computer	
Video:	See variant features
PS/2:	1 × PS/2 socket (Adapter for additional PS/2 interface available)
USB:	1 × USB B socket
USB 3.0:	1 × USB B socket
Audio:	1 × 3.5 mm jack plug (line in)
Other interfaces	
Network:	2 × RJ45 socket
Service:	1 × Mini USB B socket
Audio (DisplayPort digital + Digital audio out)	
Transmission type:	Digital, unidirectional, embedded in DisplayPort signal
Resolutions:	16/20/24 bit

## DP1.2-MUX3-ATC series

General features	
Sampling rates:	Up to 48 kHz
Digital Audio Out:	De-embedding of embedded audio in DisplayPort signal
Audio (Line In/Speaker)	
Type:	analog, transparent
Resolution:	24 bit digital, stereo
Sampling rate:	96 kHz
Bandwidth:	22 kHz
Graphics	
Signal input:	DisplayPort 1.2a (LBR, HBR, HBR2, SST, MST)
Signal output:	DisplayPort 1.2a (LBR, HBR, HBR2, SST, MST)
Colour depth:	24 bits
Exemplary resolutions:	4096 × 2160 @ 60 Hz (4K/60 Hz) 3840 × 2160 @ 60 Hz (Ultra HD/60 Hz) 2560 × 1600 @ 60 Hz 2560 × 1440 @ 144 Hz 1920 × 1200 @ 60 Hz 1920 × 1080 @ 240 Hz 2048 × 2048 @ 60 Hz (2K x 2K)  Further VESA and CEA standardized resolutions within the pixel rate (25 MP/s - 600 MP/s) and frame rate between 20 Hz and 240 Hz possible.
Pixel rate:	25 MPixel/s to 600 MPixel/s
Pixel coding:	RGB 4:4:4 with 24 bpp/8 bpc
E-EDID incl. DDC/CI:	E-EDID support via DP AUX channel
USB	
Specification:	USB 3.1 Gen 1 (USB 3.0 /USB 2.0 compatible)
Transmission rate:	SuperSpeed 5.0 Gbps (low speed, full speed, hi speed compatible)
Power (output):	HighPower (0.9A)
Max. cable length:	USB 3.0/USB 3.1: max. 3 m USB 2.0: max. 5 m
Main power supply	
Type:	Internal power pack
Connection:	IEC plug (IEC-320 C14)
Redundant power supply	
Type:	Internal power pack
Connection:	IEC plug (IEC-320 C14)
Power consumption	
Maximum:	see variant features
Operating environment	
Temperature:	+5°C to +45°C
Air humidity:	< 80%, non-condensing
Conformity	
	CE, RoHS



## DP1.2-MUX3-ATC variants

Individual features	DP1.2-MUX3-ATC	DP1.2-MUX3-ATC-MC2
<b>Number of video sources</b>		
Per computer/workstation:	1	2
<b>Interfaces for workstation</b>		
Video:	1 × DisplayPort socket	2 × DisplayPort socket
<b>Interfaces per computer</b>		
Video:	1 × DisplayPort socket	2 × DisplayPort socket
<b>Power supply</b>		
Power consumption:	0,4 A@240VAC; 0,9 mA@100VAC	0,5 A@240VAC; 1,2 mA@100VAC
<b>Housing</b>		
Material:	Anodised aluminium	
Dimensions (W × H × D):	435 × 44 × 210 mm	435 × 88 × 210 mm
Weight:	Approx. 2.7 kg	Approx. 3.5 kg

## Number of items

Item No.	Description	Design
A2100189	DP1.2-MUX3-ATC	Desktop with Rackmount-Kit
A2100190	DP1.2-MUX3-ATC-MC2	Desktop with Rackmount-Kit



## Legend

### ABBREVIATIONS

CPU = Computer module  
PC = Computer module  
CON = User module  
REM = User module

MC2 = Multi-channel 2  
MC3 = Multi-channel 3  
MC4 = Multi-channel 4

M = Multimode  
S = Singlemode  
S+ = Singlemode+

RM = For assembly in a 19" rack  
Desktop device  
DT = Desktop device  
DP = DisplayPort™

A = Audio  
R = RS232  
U = Integr. USB 2.0 up to  
16 Mbit/s  
U2 = Transp. USB 2.0 Hi-Speed  
480 Mbit/s  
D = Delay

### EQUIPMENT FEATURES



Audio



CAT cable



Compact setup



CrossDisplay-Switching



Delay



DisplayPort™



DVI dual link video



DVI single link video



Expansion



Fiber optics



High Definition Multimedia  
Interface



Keyboard/Mouse



KVM-over-IP™



Media control



Mix & Match



Modular setup



Monitoring



Multi user



Multi-channel video



Network connection



Power switching



Remote IP



RS232



Screen-Freeze



Separate local/remote user



Single user



USB 2.0



USB 3.0



VGA video



Web Interface

### COLOUR CATEGORY



KVM extenders



KVM switches



Analog KVM matrix systems



Digital KVM matrix systems



Digital signage



KVM add-ons



Monitoring & SNMP



KVM MultiPower



Accessories

## From professionals to professionals:

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