

# KVM ADD-On

2010-03

## KVM ADD-On

Value adding solutions for your KVM  
and IT applications



# Intelligent solutions

Guntermann & Drunck GmbH has been established in 1985 and is named after its founders.

Over 20 years have since past, and we are now a leading manufacturer of analog and digital KVM switching systems.

As an owner-managed company we work closely with the marketplace and make our decisions with and in the interests of our customers. It is our philosophy to meet our customers while making decisions, to accompany them in the process and ensure that they achieve their goals.

We can do this because as a medium sized company we have short communication paths and all core competencies are in house – from development through to production. This way we can even make the impossible possible at times. If it is thanks to the modularity of the products or by implementing a customised solution. We orient ourselves towards the needs of the customer – and not the other way round.

Organisations, service providers and companies of all sizes managing numerous computers, servers and other network devices trust the comprehensive advice and service provided by Guntermann & Drunck GmbH.

Thanks to these different fields of specialisation, the demands placed on the products are many and are manifold. Our products have to provide a long-life service, be secure, uncomplicated, user-friendly, understandable and adaptable.

The DevCon-Center is part of the KVM ADD-On group. It serves as central appliance for monitoring the status of networkable G&D devices of different product groups.

The DevCon-Center is connected to the network via two interfaces. By the integrated WEB interface all configurative or informative tasks are executed.

A functioning system includes a DevCon-Center and the belonging devices to be monitored.

## Highlights

- **Monitoring, reporting and requesting appliance**
- **Compatible with G&D network devices**
- **Autonomous output of message or query via WEB interface**
- **Supports SNMP + Syslog**
- **Redundant power supply**
- **2 network interfaces**
- **Central distribution of firmware updates**

High operational safety and reliability are essential to G&D products. Enhancing these well-established attributes, our latest products come with two network ports to actively query the system's status and dispatch relevant information via SNMP or Syslog-message (optional DevCon-function).

Any critical operational status can be recognised in advance and the system administrator can act accordingly. System availability and safety are increased for mission-critical applications such as live broadcast, Air or Ground Traffic Control etc.

## Supported products

This function is currently supported by the the following product families:

- DL-Vision            KVM Extender
- DL-MUX4            KVM Switch
- CompactCenter    KVM Matrixswitch

Further networkable products are projected.



Front view



Rear view

DevCon-Center

Article no.  
A320 0008



## System diagram:

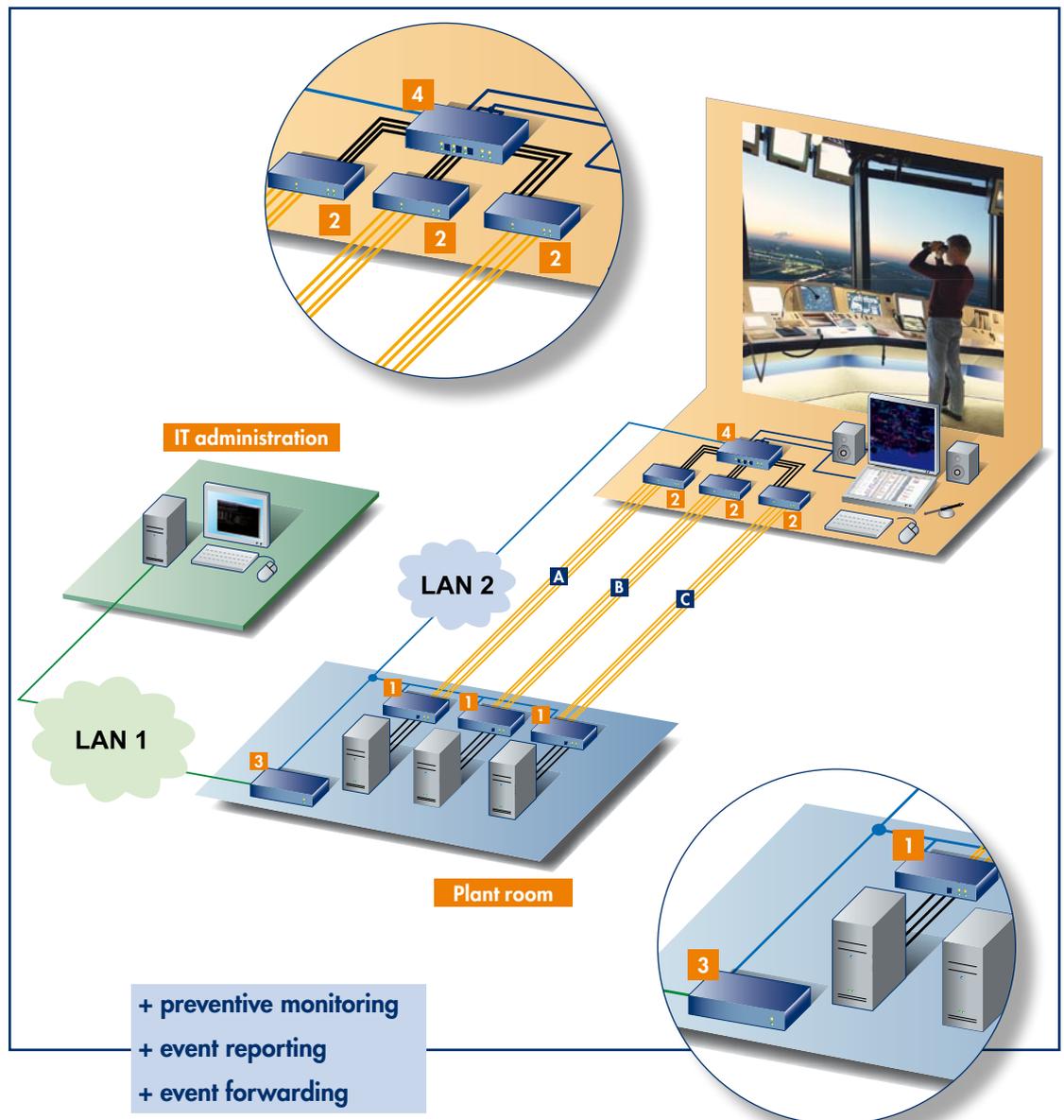
1 Computer module  
DL-Vision-  
MC2-AR-CPU

2 User module  
DL-Vision-  
MC2-AR-CON

3 Device monitoring  
DevCon-Center

4 Switch  
DL-MUX4-MC2

A Primary system  
B Redundant system  
C Fallback system



## Example

In air traffic control a highly available computer removal application by KVM Extender [3 lines (1 x operative, 1 x redundant, 1 x fall-back) with switchover] is supervised via a DevCon-Center.

Besides improving the working environment for both controller and computer, a preventive monitoring- and event-reporting system is installed. Consequently, the responsible IT department is enabled either to gather information about all connected networkable KVM devices at any time or to receive critical status messages automatically and upfront.

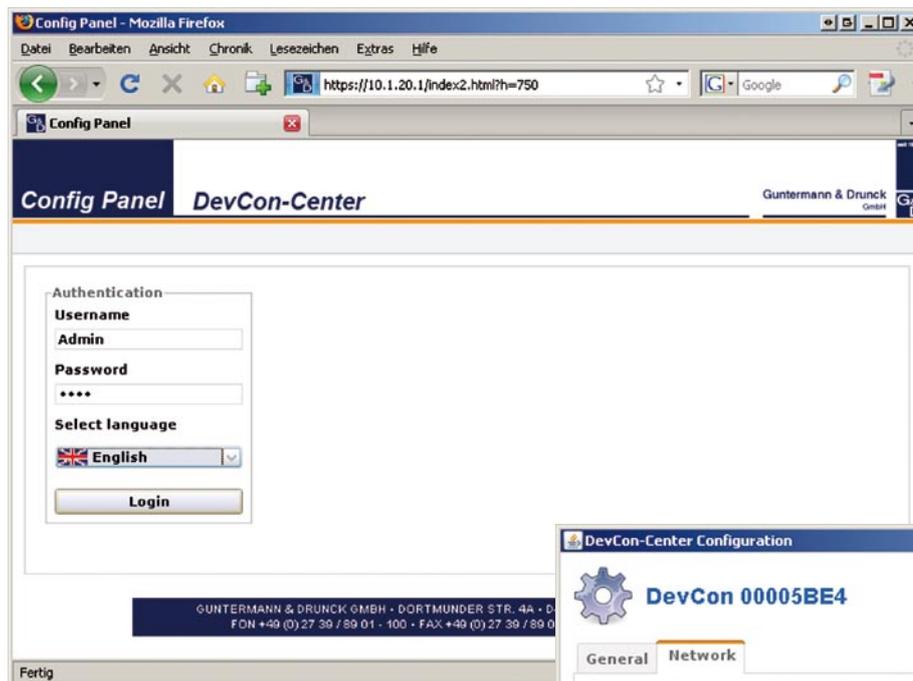
Depending on the event or any pre-defined threshold the DevCon dispatches a message to the IT administrator via network. Thus, active monitoring puts the administrator in a position to react even before an error arises.

## Operation

The configuration of the DevCon-Center and all connected networkable KVM devices is carried out through an integrated WEB interface. The access is password-protected. The authentication can be carried out either locally at the system or against the respective directory services.

Web interface

The WEB interface is provided both in German and in English.



The DevCon-Center stays in direct contact with the connected devices and queries their status or receives messages and transmits them accordingly.

Thus active monitoring becomes possible.

◀ Figure:  
Login mask of DevCon-Center WEB interface

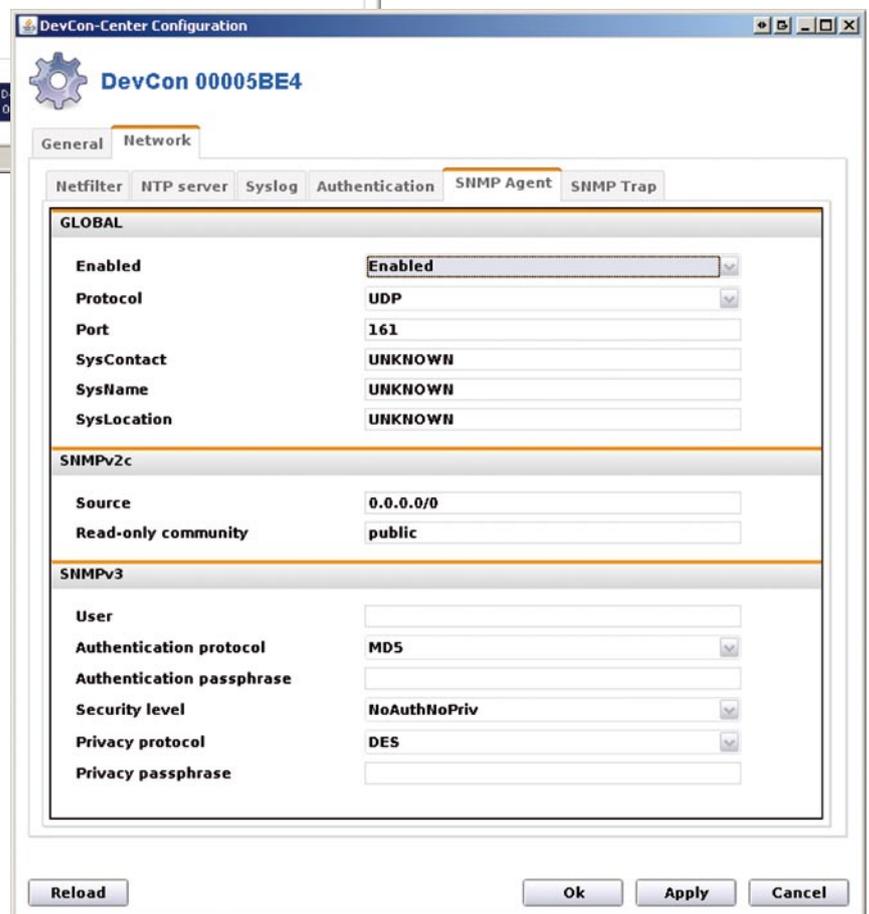
Within the configuration menu all connected networkable KVM devices can be given unique names for easy identification.

Configuring the network the user can define netfilter rules, activate the support of a central NTP server and adjust the authentication type.

Furthermore storage locations as well as log levels for syslog messages can be pre-defined within this menu.

SNMP functionality facilitates external querying of the SNMP agent by using an appropriate MIB file. The version SNMPv2c und v3 are supported. Additionally the forwarding of SNMP traps is integrated in the DevCon-Center.

▶ Figure:  
Network configuration of DevCon-Center



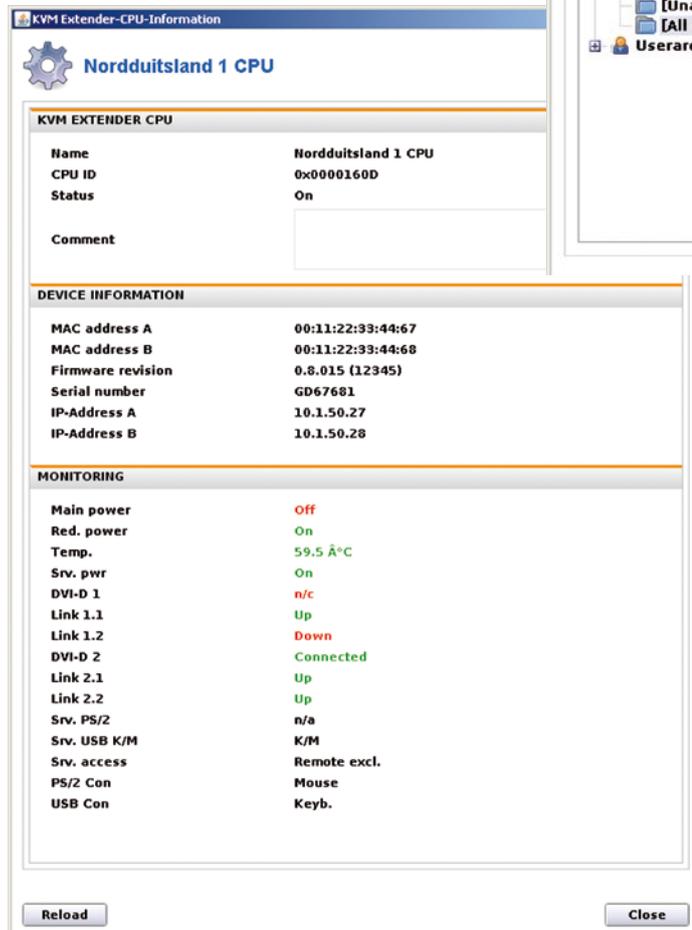
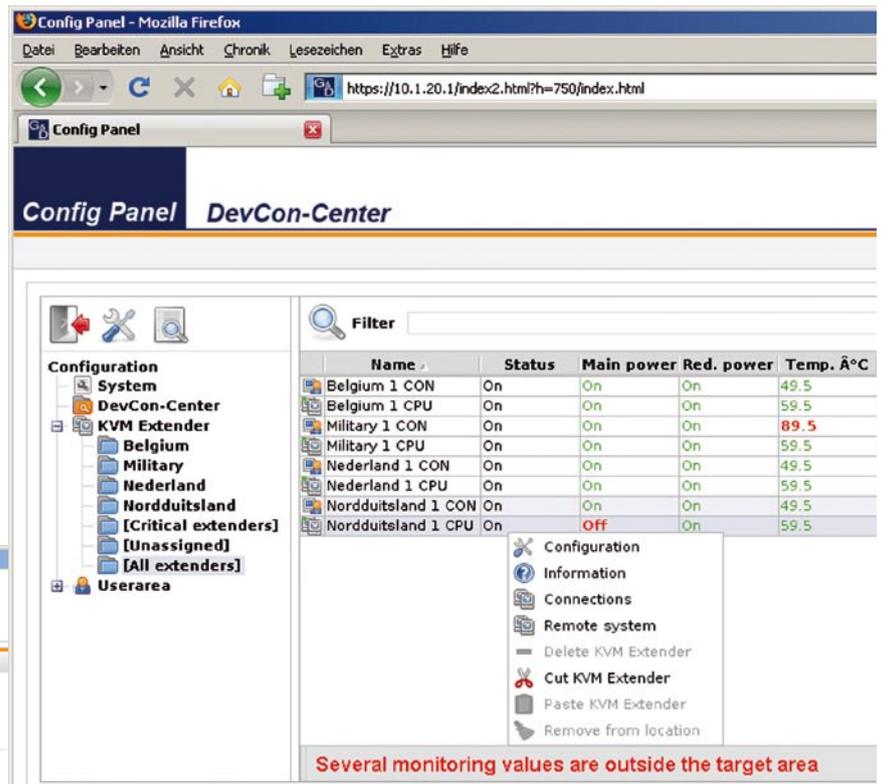
Additionally to configuring networkable KVM devices their system status can be displayed via WEB interface. Consequently the responsible administrator can monitor the complete system regardless of his location.

All available information and settings are displayed in a graphical interface (tree structure) providing the user with a better overview and enabling him to operate the interface intuitively.

All devices connected to the DevCon-Center are visualised in this tree structure.

New sectors can be created and devices can be grouped into these sectors. The default folder [Critical extenders] automatically extracts a copy of all devices with critical values allowing a fast and targeted access.

All values that differ from the target value are highlighted in red. Furthermore, the lower status bar of the WEB interface gives out a warning for each window as soon as a defined critical value is reached.



In addition to the overview (figure above), the values of all devices are also displayed in their device info card.

Among other things, the following status values are provided:

- main power supply – device
- redundant power supply – device
- power supply – computer
- DVI video input connection 1
- DVI video input connection 2
- uninterrupted transmission on all transmission cables
- access preemption for CPU or CON side

Figure left:  
Device info card of a DL-Vision-MC2-CPU KVM extender monitored by a DevCon-Center

		DevCon-Center
<b>Technical data</b>		
<b>Interfaces for local workplaces</b>		0
<b>Workplace connection</b>		via network
<b>Network</b>		
	Speed	10/100/1000 Mbit/s
	Ports	2
<b>Update procedure</b>		via WEB interface
<b>Power supply</b>		internal power pack
Main + Redundant	Type	
	Connection	Connector for non-heating devices (IEC-320 C14)
	Voltage	AC100-240V/60-50Hz 220-110mA
	Power consumption (operation)	14,2-14,8W
<b>Casing</b>		
	Material	anodised aluminium
	Dimension	W x H x D
	Desktop	435 x 44 x 210 mm
	Rackmount	19" x 1HE x 210 mm
<b>Weight</b>		approx. 2,7 kg
<b>Operation environment</b>		
	Temperature	+5 bis +40 °C
	Air humidity	< 80%, non-condensing
<b>Interfaces</b>		
	Network A	RJ45 socket
	Network B	RJ45 socket
	USB 2.0	2 x USB-A socket
	Communication RS485	RJ45 socket
	Communication RS232	RJ11 socket
	Service	Mini-USB type B
<b>Conformity</b>		CE, RoHS

## Minimum system

The DevCon-Center is a stand-alone device. Its deployment makes sense if it is used with other networkable G&D KVM devices equipped with the DevCon-function.

## Components

### DevCon-Center

Art. no.	Description	
A320 0008	DevCon-Center	Central monitoring and reporting appliance for networkable G&D devices; desktop, incl. 19" rackmount kit, 435 mm/1U

## Connectivity

Two-metres-long power supply cables are generally included.

When ordering, please quote the article number and product description

G&D's RackConsoles 17 are your solution for consolidating more computer power within limited rack space.

The compact 1U design contains an easy to install TFT-keyboard drawer with a high-quality display and a keyboard including touchpad technology.

In combination with a KVM-Switch or as a local user console of a Matrixswitch (e.g. CATCenter series) the Rack Consoles are the ideal solution for a space saving operation of all existing computers in the server cabinets.

## Highlights

- resolution 1280 x 1024 @ 60Hz [RackConsole 17 (DVI+VGA)]
- resolution 1920 x 1200 @ 60Hz [RackConsole 17-HR]
- **DVI and VGA supported**
- **rugged design**
- **requires only 1U**
- **extensive scope of supply**

The RackConsoles 17 come equipped with a TFT-display offering a VGA as well as a DVI-D interface. The resolution is 1920 x 1200 (WUXGA) for RackConsole 17-HR and 1280 x 1024 (SXGA) for RackConsole 17 (DVI+VGA).

Ball bearing runners render RackConsoles 17 to be easily mounted inside a 19" rack. Instead of the usual eight height units for a conventional monitor, the Rack Consoles 17 require only one height unit.



**RackConsole 17-DE  
(DVI+VGA)**

Article no.  
A320 0009

**RackConsole 17-EN  
(DVI+VGA)**

Article no.  
A320 0010

**RackConsole 17-HR -  
DE-PS/2**

Article no.  
A320 0013

**RackConsole 17-HR-  
EN-PS/2**

Article no.  
A320 0015



		RackConsole 17 (DVI+VGA)	RackConsole 17-HR
<b>Technical data</b>			
<b>Display</b>	Display size	17" (visible size 337 x 270 mm)	17" (visible size 337 x 232 mm)
	LCD resolution	1280 x 1024 (SXGA)	1920 x 1200 (WUXGA)
	Frame-Rate	60 Hz	60 Hz
	Pixel pitch	0,264 mm	0,191 mm
	Brightness	300 nits	400 nits
	Viewing angle horizontal	+ 75° / - 75°	140° / -140°
	Viewing angle vertical	+ 75° / - 60°	120° / -120°
	Response time	3ms (rise), 10ms (fall)	8ms
	Contrast	500 : 1	600 : 1
	Supported video formats	DVI-D Single-Link, analog colour grafics	DVI-D Single-Link, analog colour grafics Composite and S-Video
<b>Keyboard</b>	Colour depth	24 bit	18 bit
	Type	105 keys with touchpad	105 keys with touchpad
	Languages	German, English	German, English
<b>Power supply</b>	Type	integrated power pack	integrated power pack
	Connector	IEC plug (IEC-320 C14)	IEC plug (IEC-320 C14)
	Voltage	AC100-240V/60-50Hz	AC100-240V/60-50Hz
	Power consumption (operation)	30W	20W
<b>Casing</b>	Material	aluminium	aluminium
	Colour	silver	silver
	Dimensions W x H x D	483 x 44 x 535 mm	483 x 44 x 535 mm
	Rackmounted depth	19", 600 - 900 mm	19", 600 - 900 mm
<b>Weight</b>		approx. 9,5 kg	approx. 12 kg
<b>Operating environment</b>	Temperature	0 to +50 °C	0 to +50 °C
	Air humidity	< 80%, non-condensing	< 80%, non-condensing
<b>Interfaces</b>	Keyboard/mouse	2 x PS/2 socket	2 x PS/2 socket
	Video	1 x VGA socket, 1 x DVI-D socket	1 x VGA socket, 1 x DVI-D socket Composite and S-Video socket
	USB transparent		USB-A socket
<b>Conformity</b>		CE, RoHS	CE, RoHS

## Minimum system

The RackConsoles 17 are stand-alone devices. However they can be combined with several G&D devices to help optimize your service and decrease maintenance costs.

## RackConsoles 17

Art. no.	Description	
A320 0009	RackConsole 17-DE (DVI+VGA)	TFT keyboard drawer; 17" display; 19" mounting; German keyboard   1280 x 1024
A320 0010	RackConsole 17-EN (DVI+VGA)	TFT keyboard drawer; 17" display; 19" mounting; English keyboard   1280 x 1024
A320 0009	RackConsole 17-HR-DE-PS/2	TFT keyboard drawer; 17" display; 19" mounting; German keyboard   1920 x 1280
A320 0010	RackConsole 17-HR-EN-PS/2	TFT keyboard drawer; 17" display; 19" mounting; English keyboard   1920 x 1280

all incl. set of telescopic rails and power cable carrier

## Connectivity

Cables for connecting video- (DVI+VGA), keyboard/mouse, USB (HR-type) and power are supplied.

When ordering please quote the article number and the product description.

I-Keys are programmable input devices with 16 (I-Key16) or 20 (I-Key20) keys.

Similar to a keyboard the pre-defined commands are routed to a connected KVM switch or computer.

Each of the keys can cover two functions (layer technology). Thus up to 30 or 38 individual macros can be stored in the I-Keys (respectively one key is missing for switching between the layers).

## Highlights

- **1-key rapid access to shortcuts**
- **most simple creation of macros**
- **no programming knowledge needed**
- **stored commands can be understood by any computer**
- **doubling the number of keys by layer technique (less one key for changing layers)**
- **keys can be labelled individually**

Instead of the keyboard the device is connected to the keyboard interface of the computer. The keyboard itself is plugged into the PS/2 socket of the Y-cable of the I-Key. The devices are power supplied by the computer's keyboard interface.

The device is set into configuration mode by a switch located on the outer casing. Press the key you wish to programme. Then type in the macro. To save the macro press the programmed key again. Further to that at the I-Key20 two keys can be combined into one key only.



I-Key16

I-Key20

### I-Key16

Article no.  
A320 0002

### I-Key20

Article no.  
A320 0003

			I-Key16 / 20
<b>Technical data</b>			
<b>Keyboard</b>	Number of keys	I-Key16	16
		I-Key20	20
<b>Power supply</b>	Type	by keyboard interface of computer	
<b>Connection cable</b>	Length	1,9 m	
<b>Casing</b>	Material	plastics	
	Colour	black	
	Dimensions W x H x D	I-Key16	362 x 23 x 18 mm
		I-Key20	175 x 108 x 38 mm
<b>Weight</b>		I-Key16	approx. 0,2 kg
		I-Key20	approx. 0,3 kg
<b>Operation environment</b>	Temperature	0 to +50 °C	
	Air humidity	< 80%, non-condensing	
<b>Interfaces</b>	Keyboard	for keyboard	1 x PS/2 socket
		towards computer	1 x PS/2 plug
<b>Conformity</b>	CE, RoHS		

## Minimum system

I-Keys are stand-alone devices. They can be used either with G&D devices or directly connected to a computer.

## Components

### I-Keys

Art. no.	Description	
A320 0002	I-Key16	Programmable input device, 16 Keys, PS/2 design
A320 0003	I-Key20	Programmable input device, 20 Keys, PS/2 design

## Connectivity

I-Keys are delivered ready for connection.

When ordering, please quote the article number and product description

## A wealth of variants thanks to the modular design

A lot of G&D products are available with different equipment options. The icons below the product pictures show the equipment of the corresponding product.

## Important note for KVM Extender

To ensure that the computer and workstation modules are compatible, please check that functional features (letters "ARU" as well as "M" or "S") are identical on both modules. An exception to this is the "delay" component (letter "D") at CATVision which is only used in the computer module.

Example CATVision:

CATVision-ARUD-CPU + CATVision-ARU-CON = ok  
 CATVision-ARUD-CPU + CATVision-U-CON = not ok

Example LwLVision:

LwLVision(S)-MC2-ARU-PC + LwLVision(S)-MC2-ARU-REM = ok  
 LwLVision(S)-MC2-ARU-PC + LwLVision(M)-MC2-AR-REM = not ok

## ABBREVIATIONS

CPU = Computer module  
 PC = Computer module

CON = User module  
 REM = User module

MC2 = Multichannel 2  
 MC3 = Multichannel 3  
 MC4 = Multichannel 4

M = Multimode  
 S = Singlemode  
 RM = For assembly in a 19" rack

A = Audio  
 AR = Audio + RS232  
 R = RS232  
 U = transparent USB 1.1  
 U2 = transparent USB 2.0  
 D = Delay

## EQUIPMENT

 = digital single-link video

 = digital dual link video

 = analog video

 = Audio

 = RS232

 = FireWire-800

 = USB 1.1 or 2.0

 = Delay

 = Power

 = Desktop

 = Rackmount

 = Network connection

 = Web interface



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Descriptions normally reflect the max. expansion depth.

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