

NEW: PERSONALWORKPLACE-CONTROLLER



The Personalworkplace-Controller lets you display multiple computer signals, virtual sources or KVM console modules on one or several monitors at the same time. Depending on the variant, you can then also operate them on one or multiple monitors. It is possible to modify the arrangement of the individual signals at runtime.

The stand-alone product has a wide range of applications. On up to five high-resolution monitors, you can display multiple sources for which you typically would have used individual monitors in the past. Video wall applications can be realized, too.

Displays supporting higher resolutions now give you the option to work on a larger surface.

With the Personalworkplace-Controller, you can therefore design multi-monitor workstations more flexibly since it is easy to combine different video sources on only one monitor/display (or several displays). The multi-viewing tool provides many well-known and useful multi-viewer features.

KVM variants with fully integrated KVM functionality facilitate the operation of any computers/sources connected. They can also be implemented very natively in G&D systems – both in terms of connections (input-side interfaces to G&D matrix systems or extenders) and operation (select menu, CrossDisplay-Switching, etc.).

The PersonalWorkplace-Controller is available in three variants for different areas of use and applications:

- Basic KVM
- Pro KVM
- Pro Video

Highlights

- Up to 26 video inputs (Pro Video variant)
- Supports UHD input signals
- Simultaneous support of up to 5 independent monitors/displays
- Real-time architecture with low latency
- Definable arrangement on monitor
- Hardware scaling with bilinear filter for best video quality
- Highly reliable with redundancy capabilities and watch-dog build for 24/7 operation
- On-screen administration, API for remote control and touch panel support
- Fully integrated KVM functionality for multiple users (KVM variants)

Details

- All system functions in one device
- Arranging, combining, and transmitting of up to 26 different video sources to up to 4 UHD displays
- Up to two UHD input signals with a 550 MP/s pixel rate
- 2-3 frames delay from input to display possible due to real-time architecture
- Definable size, position and scaling of sources – including overlays
- Sources can be cropped at top, bottom, left or right
- Signals can be scaled with a factor from 0.1 to 10.0
- Signals can be duplicated to display the same input multiple times; they can also be cropped or resized
- The different sources can be displayed with a frame (selectable frame color and thickness)
- The sources can be named individually and the name can be displayed (definable font, color, size, and position)
- User-specific arrangements can be easily switched via Touch Panel PC, web interface with iPad or similar devices
- The arrangement settings can be stored both in the system itself and on external memories
- Switching between predefined arrangement sets takes less than 500 ms
- Even in a critical environment, you can always rely on the PersonalWorkplace-Controller.
No hard disk; redundant power supply and Active Watch Dog are used
- Extremely robust and thus ideal to be used 24/7 in medical and industrial applications
- Status information and reports accessible and retrievable via network
- Two technologies combined in one device:
Local operation of multiple sources on one monitor (dynamic workplace or personal video wall) and the possibility to create and operate a public video wall

PersonalWorkplace-Controller Basic KVM

- Input: max. 9 × Video HDMI (1 × UHD@60Hz, 3 × UHD@30Hz, 5 × FullHD@60Hz)
- Output: max. 3 × DP1.2, 1 × HDMI 2.0, 1 × DualLink DVI
- Keyboard/mouse: 7 × USB Type B K/M interface to operate up to 7 sources and 4 USB Type A ports

PersonalWorkplace-Controller Pro KVM

- Input: max. 18 × Video HDMI (2 × UHD@60Hz, 6 × UHD@30Hz, 10 × FullHD@60Hz)
- Output: max. 3 × DP1.2, 1 × HDMI 2.0, 1 × DualLink DVI
- Keyboard/mouse: 14 × USB Type B K/M interface to operate up to 14 sources and 4 USB Type A ports

PersonalWorkplace-Controller Pro Video

- Input: max. 26 × Video HDMI (2 × UHD@60Hz, 6 × UHD@30Hz, 18 × FullHD@60Hz)
- Output: max. 3 × DP1.2, 1 × HDMI 2.0, 1 × DualLink DVI

The PersonalWorkplace-Controller Pro Video lets you display the source image of one to up to 26 physical video input interfaces (console modules or other image sources) at one or multiple monitors.

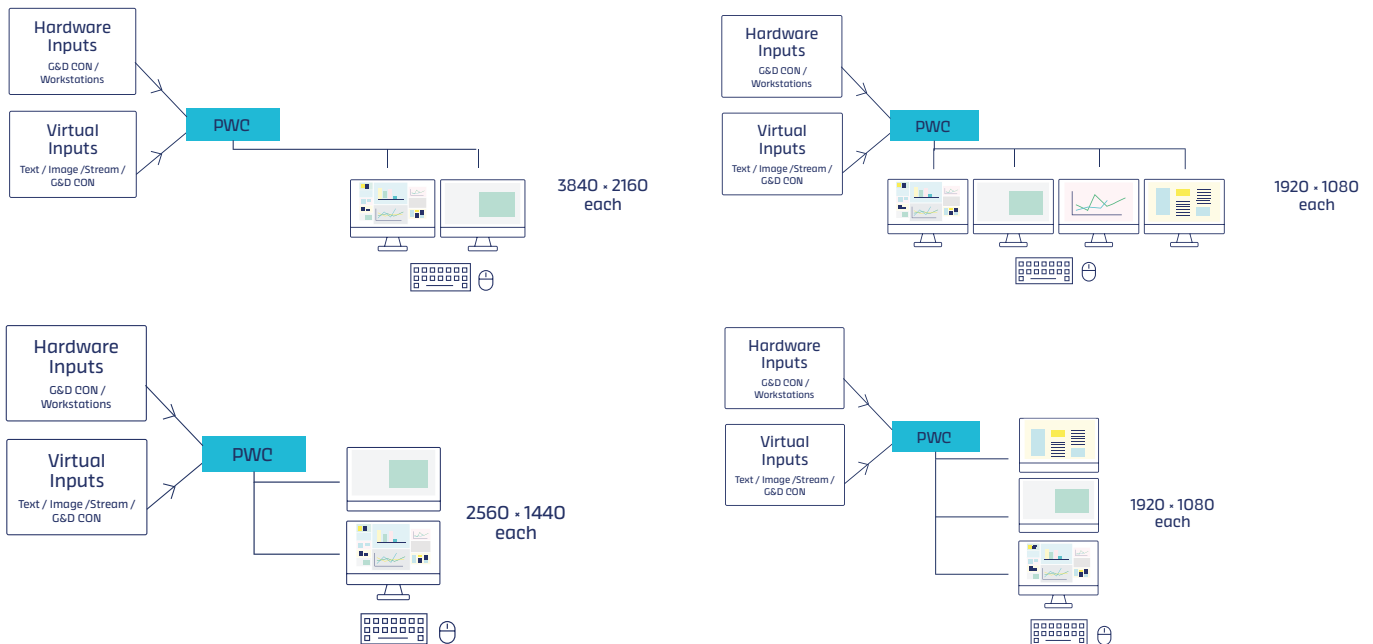
Operation

You can operate and configure the PersonalWorkplace-Controller via graphical interface. The devices also provides a web interface for programming the system.

EXAMPLE APPLICATIONS WITH KVM FUNCTION (BASIC KVM AND PRO KVM VARIANTS)

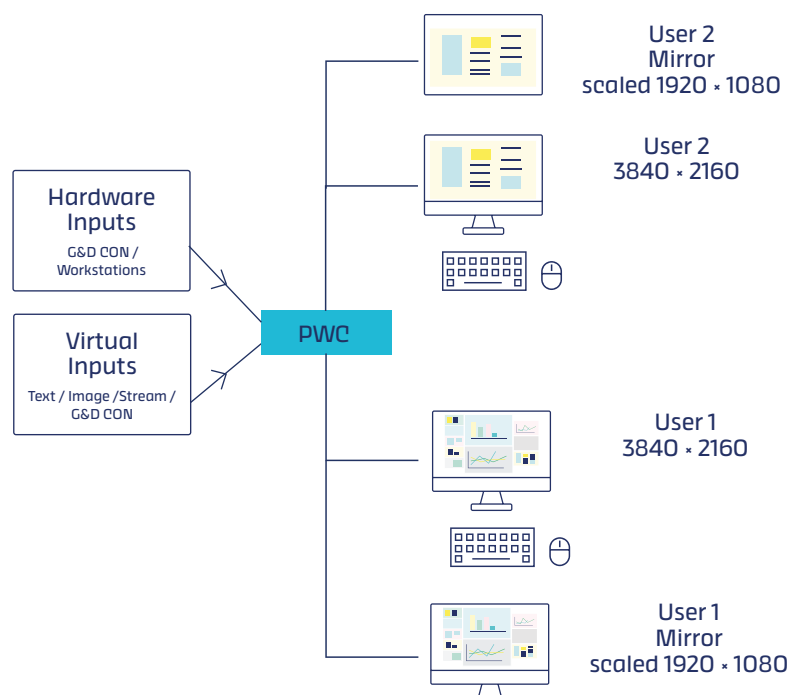
The PersonalWorkplace-Controller as multi-display manager

The PersonalWorkplace controller lets you operate multiple displays with one keyboard and mouse (all displays must have the same resolution).



The PersonalWorkplace-Controller as multi-display manager with multiple operators and mirror mode

With the PersonalWorkplace-Controller, two operators, each equipped with a 4K monitor, can operate the sources using keyboard and mouse, for example. Via stream and when scaled, the outputs can also be mirrored.



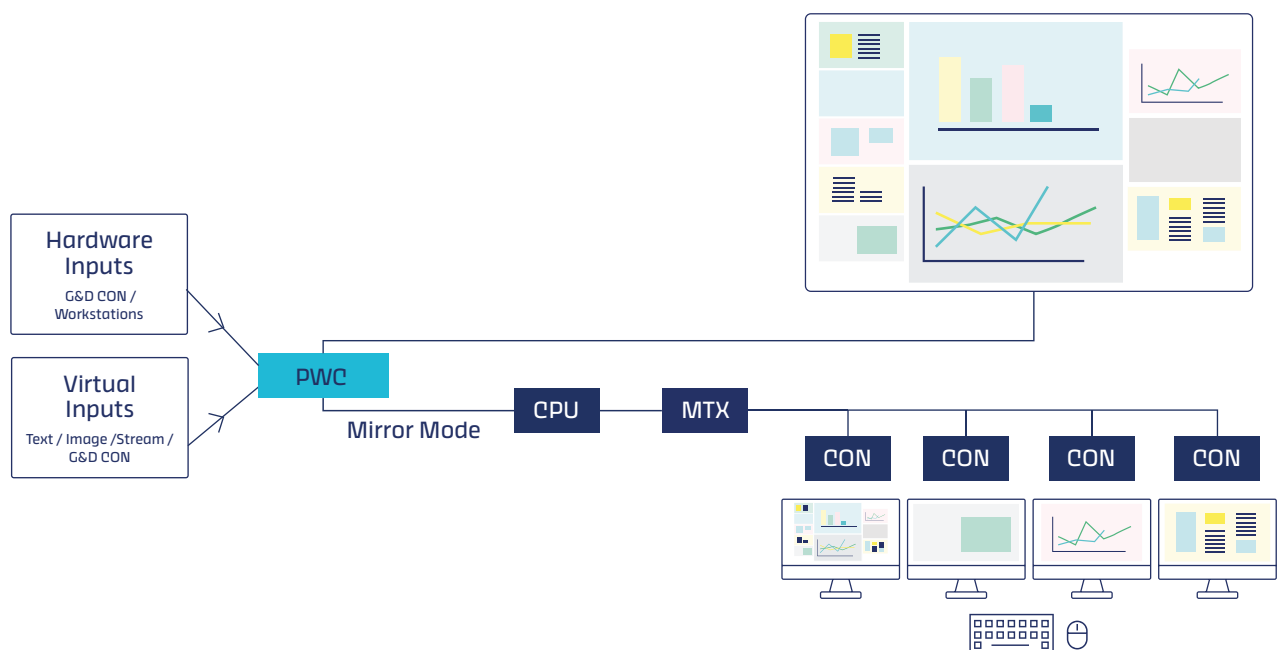
The PersonalWorkplace-Controller as multi-display manager in combination with dynamic mode

With the PersonalWorkplace-Controller, you can also use larger screens (e.g. 5120 × 1440) by applying the dynamic mode. With the Pro KVM variant, you can operate up to four of these workstations simultaneously.



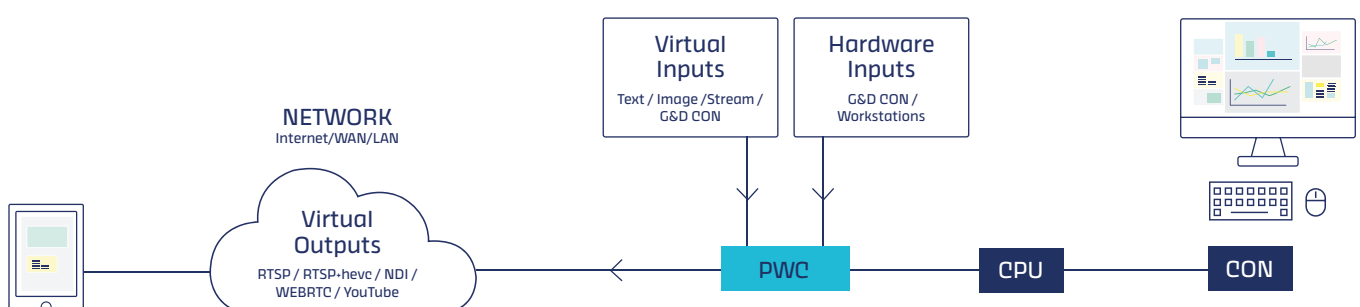
The PersonalWorkplace-Controller as video wall manager in combination with a KVM matrix system

You can also use the PersonalWorkplace-Controller to display sources on a large video wall. Using a second output of the device in mirror mode scales the 4K wall to HD/QHD. This output is connected to a KVM-CPU. Now the local operator simply connects to this CPU to operate the video wall.



The PersonalWorkplace-Controller as a multi-viewing tool in combination with a KVM extender system

The PersonalWorkplace controller enables you to view consoles via streams on various devices such as a laptop or tablet.



EXAMPLE APPLICATIONS WITHOUT KVM FUNCTION (PRO VIDEO VARIANT)

The PersonalWorkplace-Controller as video wall controller

The PersonalWorkplace-Controller also offers you numerous possibilities as a video wall controller.



PERSONALWORKPLACE-CONTROLLER

VARIANTS COMPARED

	PersonalWorkplace-Controller Basic KVM	PersonalWorkplace-Controller Pro KVM	PersonalWorkplace-Controller Pro Video
Physical inputs	9 × HDMI: 1 × UHD@60Hz, 3 × UHD@30Hz, 5 × FullHD@60Hz	18 × HDMI: 2 × UHD@60Hz, 6 × UHD@30Hz, 10 × FullHD@60Hz	26 × HDMI: 2 × UHD@60Hz, 6 × UHD@30Hz, 18 × FullHD@60Hz
Virtual inputs	5 (RTSP, NDI, pictures, text, video files)	5 (RTSP, NDI, pictures, text, video files)	5 (RTSP, NDI, pictures, text, video files)
Physical outputs	5 3 × DisplayPort 1.2 1 × HDMI 2.0 1 × DualLink-DVI	5 3 × DisplayPort 1.2 1 × HDMI 2.0 1 × DualLink-DVI	5 3 × DisplayPort 1.2 1 × HDMI 2.0 1 × DualLink-DVI
Virtual outputs	RTSP RTSP HEVC NDI WebRTC	RTSP RTSP HEVC NDI WebRTC	RTSP RTSP HEVC NDI WebRTC
Output licenses incl.	1 × 8 MP or 1 × video output	2 × 8 MP or 2 × video output	2 × 8 MP or 2 × video output
Additional output licenses	PWC Display License 8 MP for “Basic” variant (only one additional A8200054 license possible)	PWC Display License 8 MP for “Pro” variants (A8200053)	PWC Display License 8 MP for “Pro” variants (A8200053)
HID-USB uplinks	7	14	n/a
Available K/M operators	4	4	4 (without KVM function- ality)
PersonalWorkplace- Controller mode with KVM	Yes	Yes	No
Mirror mode	Yes (in connection with additional output license A8200054)	Yes (in connection with the second included or additional output licenses A8200053)	Yes (in connection with the second included or additional output licenses A8200053)
PersonalWorkplace- Controller mode (without KVM)	Yes	Yes	Yes
Default mode (Legacy mode)	Yes	Yes	Yes
Dynamic mode	Yes	Yes	Yes
Redundant power supply	Yes	Yes	Yes
REST-API	Yes	Yes	Yes

PERSONALWORKPLACE-CONTROLLER

AN OVERVIEW OF THE DIFFERENT MODES

	PersonalWorkplace-Controller with KVM (in combination with the "PersonalWorkplace-Controller" mode")	Mirror	PersonalWorkplace-Controller (without KVM)
Available for physical outputs	Yes	Yes	Yes
Available for virtual outputs	No	Yes	Yes
Details	Dynamic workplace Application: You can operate any displayed inputs using keyboard/mouse. The displayed inputs can also be operated via a touch monitor (HID touch screen emulation). If several PersonalWorkplace-Controllers access the same input, you can allow or deny MultiAccess. Up to four different PersonalWorkplace-Controllers can be set up with KVM.	Using the mirror mode, an output can be cloned or mirrored (comparable to a splitter function) In addition, it is possible to scale the mirrored output to a different resolution. Example: Original output: 4K@60Hz Mirrored output: 1080p@60Hz	Video wall application: Inputs can be displayed, freely positioned and scaled. Can be operated via keyboard/mouse, touch-screen, API or web interface. Freestyle mode: Inputs can be overlaid, freely positioned, and scaled. Application: Flexible and fast positioning of outputs Swap mode: If the input displayed is swapped with another input, the display settings are swapped as well and transferred to the other one. Application: Operation and monitoring of different inputs

OVERVIEW OF DISPLAY/MONITOR MODES

	Default mode (legacy mode)	Dynamic mode
Available for physical outputs	Yes	Yes
Available for virtual outputs	Yes	Yes
Details	In legacy mode, 8 MP licenses are used. Any number of physical and/or virtual outputs can be operated as long as they are in the activated MP range. Example: with an 8MP license: 1 × 3840 × 2160 or 4 × 1920 × 1080 The total available pixel area is 8192 × 4096 (mirror mode is excluded). The following classic 16:9 or 16:10 resolutions are supported: 3840 × 2160, 2560 × 1600, 2560 × 1440, 1920 × 1200, 1920 × 1080	In dynamic mode, an 8 MP license is required for each connected monitor/display – regardless of the actual pixel grid used with the monitor/display. A virtual monitor and a mirrored display (mirror mode) also require an individual license. One of the biggest advantages of the dynamic mode is that you can use each video output at full bandwidth. Instead of the pre-defined resolution or the maximum pixel grid (as in legacy mode), the “real” EDID resolutions of the connected monitors are used in this case. This way, you can also use modern resolutions such as 5120 × 1440, for example. The total available pixel grid is 8192 × 8192.

TECHNICAL DATA

PERSONALWORKPLACE-CONTROLLER BASIC KVM

Video inputs	
Quantity	9
Socket	see "Video card"
Signal	see "Video card"
Features	see "Video card"
Video outputs	
Interfaces	3 × DisplayPort 1.2 (max 600 MP/s)
	1 × HDMI 2.0 (max. 600 MP/s)
	1 × Dual-Link-DVI (max. 330 MP/s)
Video processing	
No. of monitors	Default mode (Legacy mode): Max. 5
	Dynamic mode: 1 (expandable for a fee to up to 2)
Supported pixel grid Ex works	Default mode (Legacy mode): 8 MP (expandable for a fee to up to 16 MP)
	Dynamic mode: any within the max. pixel grid
Max. pixel grid	Default mode (Legacy mode): max. 8192 pixels horizontally max. 4096 pixels vertically
	Dynamic mode: max. 8192 pixels horizontally max. 8192 pixels vertically
Resolutions	Default mode (legacy mode): 3840 × 2160 2560 × 1600 2560 × 1440 1920 × 1200 1920 × 1080
	Dynamic mode: 5120 × 1440 3840 × 2160 3840 × 1600 3840 × 1440 3840 × 1080 3440 × 1440 2560 × 1440 2048 × 2048 1920 × 1200 1920 × 1080 Further VESA and CTA standardized resolutions within the scope of the pixel rate and horizontal/vertical frequency possible.
Exemplary resolutions	

Pixel rate	
Video card	Max. 1,200 MP/s
Per system	Max. 2,000 MP/s
USB connection to hosts	
Socket	7 × USB-B
Other interfaces	
Network	1 × RJ45 socket (10/100/1000 MBit/s)
USB	4 × USB-A socket (display 1...4)
Power supply	
Type	Internal power supply unit
Quantity	2
Connection	IEC plug (IEC-320 C14)
Power consumption	100-240 VAC/63-47Hz/5.00-2.50 A
Housing	
Material	Steel plate
Dimensions (W × H × D):	483 × 177 × 450 mm
Weight:	Approx. 20 kg
IP protection class	IP20
Operating environment	
Temperature	+5°C to +40°C
Air humidity	10 % to 80 %, non-condensing
Storage environment	
Temperature	-20°C to +70°C
Air humidity	10 % to 95 %, non-condensing

VIDEO CARD FEATURES

PERSONALWORKPLACE-CONTROLLER BASIC KVM



Video card	
Input 1	
Socket	HDMI socket
Signal	HDMI
H display	Min. 320 pixel; max. 4096 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 550 MP/s
Inputs 1, 2, 3, 4	
Socket	HDMI socket
Signal	HDMI
H display	Min. 320 pixel; max. 4096 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 300 MP/s
Inputs 5, 6, 7, 8	
Socket	HDMI socket
Signal	Single-link DVI
H display	Min. 320 pixel; max. 2560 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 165 MP/s
Input 9	
Socket	HDMI socket
Signal	HDMI
H display	Min. 320 pixel; max. 2560 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 165 MP/s
Pixel rate	
Per video card	Max. 1,200 MP/s

TECHNICAL DATA

PERSONALWORKPLACE-CONTROLLER PRO KVM

Video inputs	
Quantity	18
Socket	see "Video cards"
Signal	see "Video cards"
Features	see "Video cards"
Video outputs	
Interfaces	3 × DisplayPort 1.2 (max 600 MP/s)
	1 × HDMI 2.0 (max. 600 MP/s)
	1 × Dual-Link-DVI (max. 330 MP/s)
Video processing	
No. of monitors	Default mode (Legacy mode): Max. 5
	Dynamic mode: 2 (expandable for a fee)
Supported pixel grid Ex works	Default mode (legacy mode): 16 MP (expandable for a fee)
	Dynamic mode: any within the max. pixel grid
Max. pixel grid	Default mode (legacy mode): max. 8192 pixels horizontally max. 4096 pixels vertically
	Dynamic mode: max. 8192 pixels horizontally max. 8192 pixels vertically
Resolutions	Default mode (legacy mode): 3840 × 2160 2560 × 1600 2560 × 1440 1920 × 1200 1920 × 1080
	Dynamic mode: 5120 × 1440 3840 × 2160 3840 × 1600 3840 × 1440 3840 × 1080 3440 × 1440 2560 × 1440 2048 × 2048 1920 × 1200 1920 × 1080
Exemplary resolutions	Further VESA and CTA standardized resolutions within the scope of the pixel rate and horizontal/vertical frequency possible.

Pixel rate	
Per video card	Max. 1,200 MP/s
USB connection to hosts	
Socket	14 × USB-B
Other interfaces	
Network	1 × RJ45 socket (10/100/1000 MBit/s)
USB	4 × USB-A socket (display 1...4)
Power supply	
Type	Internal power supply unit
Quantity	2
Connection	IEC plug (IEC-320 C14)
Power consumption	100-240 VAC/63-47Hz/5.00-2.50 A
Housing	
Material	Steel plate
Dimensions (W × H × D):	483 × 177 × 450 mm
Weight:	Approx. 20 kg
IP protection class	IP20
Operating environment	
Temperature	+5°C to +40°C
Air humidity	10 % to 80 %, non-condensing
Storage environment	
Temperature	-20°C to +70°C
Air humidity	10 % to 95 %, non-condensing

VIDEO CARDS FEATURES

PERSONALWORKPLACE-CONTROLLER PRO KVM



Video card 1 > see "Video card Personalworkplace-Controller Basic KVM"

Video card 2

Input 10

Socket	HDMI socket
Signal	HDMI
H display	Min. 320 pixel; max. 4096 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 550 MP/s

Inputs 11, 12, 13

Socket	HDMI socket
Signal	HDMI
H display	Min. 320 pixel; max. 4096 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 300 MP/s

Inputs 14, 15, 16, 17

Socket	HDMI socket
Signal	Single-link DVI
H display	Min. 320 pixel; max. 2560 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MHz; max. 165 MP/s

Input 18

Socket	HDMI socket
Signal	HDMI
H display	Min. 320 pixel; max. 2560 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MHz; max. 165 MP/s

Pixel rate

Per video card	Max. 1,200 MP/s
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TECHNICAL DATA

PERSONALWORKPLACE-CONTROLLER PRO VIDEO

Video inputs	
Quantity	26
Socket	see "Video cards"
Signal	see "Video cards"
Features	see "Video cards"
Video outputs	
Interfaces	3 × DisplayPort 1.2 (max 600 MP/s)
	1 × HDMI 2.0 (max. 600 MP/s)
	1 × Dual-Link-DVI (max. 330 MP/s)
Video processing	
No. of monitors	Default mode (Legacy mode): Max. 5
	Dynamic mode: 2 (expandable for a fee)
Supported pixel grid Ex works	Default mode (Legacy mode): 16 MP (expandable for a fee)
	Dynamic mode: any within the max. pixel grid
Max. pixel grid	Default mode (Legacy mode): max. 8192 pixels horizontally max. 4096 pixels vertically
	Dynamic mode: max. 8192 pixels horizontally max. 8192 pixels vertically
Resolutions	Default mode (Legacy mode): 3840 × 2160 2560 × 1600 2560 × 1440 1920 × 1200 1920 × 1080
	Dynamic mode: 5120 × 1440 3840 × 2160 3840 × 1600 3840 × 1440 3840 × 1080 3440 × 1440 2560 × 1440 2048 × 2048 1920 × 1200 1920 × 1080
Exemplary resolutions	Further VESA and CTA standardized resolutions within the scope of the pixel rate and horizontal/vertical frequency possible.

Pixel rate	
Per video card	Max. 1,200 MP/s
Per system	Max. 2,000 MP/s
Other interfaces	
Network	1 × RJ45 socket (10/100/1000 MBit/s)
USB	4 × USB-A socket (display 1...4)
Power supply	
Type	Internal power supply unit
Quantity	2
Connection	IEC plug (IEC-320 C14)
Power consumption	100-240 VAC/63-47Hz/5.00-2.50 A
Housing	
Material	Steel plate
Dimensions (W × H × D):	483 × 177 × 450 mm
Weight:	Approx. 20 kg
IP protection class	IP20
Operating environment	
Temperature	+5°C to +40°C
Air humidity	10 % to 80 %, non-condensing
Storage environment	
Temperature	-20°C to +70°C
Air humidity	10 % to 95 %, non-condensing

VIDEO CARDS FEATURES

PERSONALWORKPLACE-CONTROLLER PRO VIDEO



Video card 1 > see "Video card Personalworkplace-Controller Basic KVM"

Video card 2 > see "Video card Personalworkplace-Controller Pro KVM"

Video card 3

Inputs 19, 20, 21, 22, 23

Socket	HDMI socket
Signal	HDMI
H display	Min. 320 pixel; max. 2560 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 165 MP/s

Inputs 24, 25, 26

Socket	HDMI socket
Signal	Single-link DVI
H display	Min. 320 pixel; max. 2560 pixel
V display	Min. 200 lines; max. 2560 lines
Pixel rate	Min. 16 MP/s; max. 165 MP/s

Pixel rate

Per video card	Max. 1,200 MP/s
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ARTICLE OVERVIEW

Art. no.	Name	Description
A4000023	PersonalWorkplace-Controller Basic KVM	Multiviewer and multi-display solution with up to 9 video inputs (incl. 2 × UHD), 5 video outputs (incl. 2 × UHD) and KVM function
A4000024	PersonalWorkplace-Controller Pro KVM	Multiviewer and multi-display solution with up to 18 video inputs (incl. 2 × UHD), 5 video outputs (incl. 2 × UHD) and KVM function
A4000025	PersonalWorkplace-Controller Pro Video	Multiviewer and multi-display solution with up to 26 video inputs (incl. 2 × UHD) and 5 video outputs (incl. 2 × UHD)
A8200054	PWC Display License 8 MP for “Basic” variant	Additional OUTPUT license 8MP for the use with PersonalWorkplace-Controller variant „Basic KVM“
A8200053	PWC Display License 8 MP for “Pro” variants	Additional OUTPUT license 8MP for the use with PersonalWorkplace-Controller variants “Pro KVM” and “Pro Video”