

GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Physical Dimensions, Server:			
428 x 178 x 596mm (W x H x D without handles)			
482 x 178 x 649mm (W x H x D with handles)			
Physical Dimensions, DVI-Processor:			
482 x 44 x 140mm (W x H x D)			
Weight: appx. 30 kg			
Case: 6 U 19" Rackmount (optional)			
Server grade hardware components, built for 24/7 use.			
Hard Drive Capacity (redundant memory space/RAID): Please note that the Pandoras Box installer file itself will require appx. 90GB of your available disk space.	SSD: 240 GB/1	SSD: 480 GB/10	SSD: 960 GB/10
Power Supply Voltage: 100-240 V			
Power Supply Wattage: 850 W			
Operating System: Windows 8.1			
Front Panel LCD Display			
Mouse/Keyboard (German or English):			
Certifications: CB and ETL			
USB Ports (one USB Port needed for DVI-Processor)	2+2	2+2	2+2
OUTPUTS & INPUTS			
2x 3G HD-SDI Output	YES	YES	YES
4x DVI Single Link (parallel to HD-SDI)	YES	YES	YES
Art-Net	YES	YES	YES
Genlock/Framelock/IO	YES	YES	YES
2x HD-SDI Input card included	YES	YES	YES
VIDEO			
Maximum Playback Resolution: Playback up to 4K / 8K is possible, performance depends on factors like codecs, compression (where applicable) etc. Special image ratios up to 16K or 32K canvas width are possible with image sequences, depending on overall pixel measurements. If in doubt, please consult with coolux – A Christie company.			
Maximum Output Resolution: 1920 x 1080 @60p per output.			
Maximum number of video layers:	8	16	Unlimited
Maximum number of graphics layers:	Unlimited	Unlimited	Unlimited
Maximum number of particle systems:	Unlimited	Unlimited	Unlimited
Maximum number of effects:	Unlimited	Unlimited	Unlimited
Base Parameter: XYZ, Scale, rotation, position, pivot	YES	YES	YES
Sequences:	1	1	1
Network Control:	YES	YES	YES
Recording (MPEG2, frame accurate recording):	YES	YES	YES
Embedded Encoder	YES	YES	YES
Extensive Media Library	YES	YES	YES
Media Format (recommended): Please keep in mind that different types of content will work better with different types of codecs. Please also refer to the performance charts towards the end of this document.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.
General formats: MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended), JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000 (via Image Converter) *(referring to all codecs included in Windows)			
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	8	16	Unlimited
Outputs of build in ASIO sound card.	8	8	8
Synchronized playback on multiple machines.	YES	YES	YES
KEY FEATURES			
Realtime 3D Rendering	YES	YES	YES
Advanced 3D Projection Mapping	YES	YES	YES
Softedge	YES	YES	YES
Keystone	YES	YES	YES
Synchronized Video and Audio Playback on multiple machines.	YES	YES	YES
Genlock	YES	YES	YES
Advanced EDID Management	YES	YES	YES
Aeon Effects Engine	YES	YES	YES
A realtime dynamic shader effects engine.			
FireFly Particle System	YES	YES	YES
Realtime 3D Particle System	YES	YES	YES
Playlists	YES	YES	YES
Venue Sites 3D Pre-Visualisation Tool	YES	YES	YES
Web Browser	YES	YES	YES
Web Server	YES	YES	YES
Art-Net based video pixels to DMX channel mapping.	YES	YES	YES
Multiscreen-Playback	YES	YES	YES
S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D	YES	YES	YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES	YES	YES
StreamIX	8	16	32
Media Encryption	Decryption	Decryption	Decryption
EMBEDDED CONTENT TOOLS			
Warper:	3D	3D	3D

Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The Warper also supports .3ds and .fbx files.				
Dome Master:	YES	YES	YES	
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.				
Splitter:	YES	YES	YES	
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.				
Matrix Patcher:	YES	YES	YES	
The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.				
Image Converter:	YES	YES	YES	
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files. Synchronized playback on multiple machines.	YES	YES	YES	
TECHNICAL SHOW CONTROL DETAILS				
Master/Client Ability (Master or client)	YES	YES	YES	
Synchronized Multiscreen Playback	YES	YES	YES	
Video Engine: Full 3D Render Engine	YES	YES	YES	
Global video effects on output	YES	YES	YES	
Realtime rendering	YES	YES	YES	
Remote Control (via PB Manager)	YES	YES	YES	
Sequences in Master Mode	1	1	1	
Sequence Control via SMPTE (SMPTE Master or Slave)	YES	YES	YES	
Sequence Control via Art-Net	YES	YES	YES	
Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control via Art-Net (Patchable)	YES	YES	YES	
Control via RS232/422 send/receive (WD/Spark)	YES	YES	YES	
Control via MA Net, input only	YES	YES	YES	
Control via SACN	YES	YES	YES	
MIDI Show Control, input only	YES	YES	YES	
Thumbnail Exchange via CIP 1.0	YES	YES	YES	
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)	YES	YES	YES	
Warper for 3D mapping	YES	YES	YES	
Video Out via Matrix (Art-Net, parallel to first DVI output)	YES	YES	YES	
3D Objects on layers, .x files, objects and texture	YES	YES	YES	
Softedge on outputs (left/right/top/bottom)	YES	YES	YES	
Up to 100% Overlap-Region	YES	YES	YES	
Keystone on outputs, 16Bit, left/right(top/bottom(linearity)	YES	YES	YES	
Maximum number of additional input cards (Dual HD-SDI Inputcard included)	1	1	1	
General 3D Object information				
Maximum of 65000 vertices, x.files, objects have to be set to pivot, objects needs a have a mapped texture.				
DVI-PROCESSOR				
2x DVI-D Dual Link-In (max. 1 meter cable length at input)				
4xDVI-D Single Link Out				
2x SDI-Out (SD-HD, 3G ready)				
Supported resolutions: PAL, NTSC, 720p50, 720p59, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i60				
4K Display Support				
4K Display Synchronisation (2 x 2048 x 1080@60hz)				
Built-in EDID Management				
OPTIONAL INPUT CARDS				
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI, Single 3G HD-SDI, Dual 3G HD-SDI, Quad 3G HD-SDI				
OPTIONAL ACCESSORIES				
DMX Link In				
DMX Link Out				
SMPTE-Link				
Net Link I/O solutions for embedding analogue sensors and relays with the media system.				
Widget Designer (for interactive and sensor based applications)				
R3 SERVER HARDWARE PERFORMANCE OVERVIEW				
Mpeg Videos				
720p 1280x720p30 @14Mbit/s	16	20	20	
HD 1920x1080p30 @20Mbit/s	8	10	12	
4K* 4080x2160p30 @80Mbit/s	2	2	2	
4K* 4080x2160p60 @160Mbit/s	1	1	1	
Pandoras Box DDS (Imageseq or MOV)				
HD 1920x1080p30	16	20	24	
4K* 4096x2160p30	2	2	2	
4K* 4096x2160p60	1	1	1	
Pandoras Box DDSA (Imageseq or MOV)				
HD 1920x1080p30	8	10	12	
4K* 4096x2160p30	1	1	1	
Pandoras Box YCoCg				

HD 1920x1080p30	8	10	12	
QT ProRes 422				
HD 1920x1080p30	2	2	2	
AVI Uncompressed				
HD 1920x1080p30	2	2	2	
Pandoras Box BMP imageseq				
HD 1920x1080p30 (SNP)	2	4	4	
HD-SDI Live Input				
1920x1080 i59.94 (De-interlaced, TopField)	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	0	0	0	
or additional simultaneous DDS 1920x1080p30	2	4	4	
1920x1080 i59.94 (De-interlaced, TopField)	1	1	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
3G Live Input				
1920x1080 p59.94	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	2	4	4	
or additional simultaneous DDS 1920x1080p30	6	8	8	
1920x1080 p59.94	1	1	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
All information contained within this document is subject to change without prior notice. *The same approximate values also apply to UHD 3840x2160 test results.				

GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Physical Dimensions, Server:			
428 x 178 x 596mm (W x H x D without handles)			
482 x 178 x 649mm (W x H x D with handles)			
Physical Dimensions, DVI-Processor:			
482 x 44 x 140mm (W x H x D)			
Weight: appx. 30 kg			
Case: 6 U 19" Rackmount (optional)			
Server grade hardware components, built for 24/7 use.			
Hard Drive Capacity (redundant memory space/RAID):			
Please note that the Pandoras Box installer file itself will require appx. 90GB of your available disk space.	SSD OPTION: 240 GB/1	SSD OPTION: 480 GB/10	SSD OPTION: 960 GB/10
Power Supply Voltage: 100-240 V			
Power Supply Wattage: 850 W			
Operating System: Windows 8.1			
Front Panel LCD Display			
Mouse/Keyboard (German or English):			
Certifications: CB and ETL			
USB Ports (one USB Port needed for DVI-Processor)	2+2	2+2	2+2
OUTPUTS			
4x3G HD-SDI Outputs	YES	YES	YES
Art-Net	YES	YES	YES
Genlock/Framelock/IO	YES	YES	YES
INPUTS			
2x 3G HD-SDI Input card included	YES	YES	YES
VIDEO			
Maximum Playback Resolution:			
Playback up to 4K / 8K is possible, performance depends on factors like codecs, compression (where applicable) etc. Special image ratios up to 16K or 32K canvas width are possible with image sequences, depending on overall pixel measurements. If in doubt, please consult with coolux – A Christie company.			
Maximum Output Resolution:			
1920 x 1080 @60p per output			
Maximum number of video layers:	8	16	Unlimited
Maximum number of graphics layers:	Unlimited	Unlimited	Unlimited
Maximum number of particle systems:	Unlimited	Unlimited	Unlimited
Maximum number of effects:	Unlimited	Unlimited	Unlimited
Base Parameter:			
XYZ, Scale, rotation, position, pivot	YES	YES	YES
Sequences:	1	1	1
Network Control:	YES	YES	YES
Recording (MPEG2, frame accurate recording):	YES	YES	YES
Embedded Encoder	YES	YES	YES
Extensive Media Library	YES	YES	YES
Media Format (recommended):			
Please keep in mind that different types of content will work better with different types of codecs. Please also refer to the performance charts towards the end of this document.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.
General formats: MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended), JPEG, JPEG2000, .3DS, . FBX, BMP, TGA, PNG, WAV, MP3, MPEG4, H.264, JPEG2000 (only via Image Converter)			
*(referring to all codecs included in Windows)			
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	8	16	Unlimited
Outputs of build in ASIO sound card.	8	8	8
Synchronized playback on multiple machines.	YES	YES	YES
KEY FEATURES			
Realtime 3D Rendering	YES	YES	YES
Advanced 3D Projection Mapping	YES	YES	YES
Softedge	YES	YES	YES
Keystone	YES	YES	YES
Synchronized Video and Audio Playback on multiple machines.	YES	YES	YES
Genlock	YES	YES	YES
Advanced EDID Management	YES	YES	YES
Aeon Effects Engine	YES	YES	YES
A realtime dynamic shader effects engine.			
Playlist	YES	YES	YES
FireFly Particle System	YES	YES	YES
Realtime 3D Particle System	YES	YES	YES
Art-Net based video pixels to DMX channel mapping.	YES	YES	YES
Multiscreen-Playback	YES	YES	YES
Venue Sites 3D Pre-Visualisation Tool	YES	YES	YES
S3D Stereocopy/ Active 3D/ passive 3D/ Side by Side 3D	YES	YES	YES
Web Browser	YES	YES	YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES	YES	YES
StreamIX	8	16	32
Media Encryption	Decryption	Decryption	Decryption
EMBEDDED CONTENT TOOLS			
Warper:			
Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The Warper also supports .3ds and .fbx files.	3D	3D	3D
Dome Master:			
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	YES	YES	YES
Splitter:			
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	YES	YES	YES
Matrix Patcher:	YES	YES	YES
The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.			
Image Converter:			
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.	YES	YES	YES
Synchronized playback on multiple machines.	YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS			
Master/Client Ability (Master or client)	YES	YES	YES
Synchronized Multiscreen Playback	YES	YES	YES
Video Engine: Full 3D Render Engine	YES	YES	YES
Global video effects on output	YES	YES	YES
Realtime rendering	YES	YES	YES
Remote Control (via PB Manager)	YES	YES	YES
Sequences in Master Mode	1	1	1
Sequence Control via SMPTE (SMPTE Master or Slave)	YES	YES	YES

Sequence Control via Art-Net		YES	YES	YES
Layer/Camera Control via Art-Net (Patchable)		YES	YES	YES
Control via RS232/422 send/receive (WD/Spark)		YES	YES	YES
Control via MA Net, input only		YES	YES	YES
Control via SACN		YES	YES	YES
MIDI Show Control, input only		YES	YES	YES
Thumbnail Exchange via CIP 1.0		YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)		YES	YES	YES
Warper for 3D mapping		YES	YES	YES
Video Out via Matrix (Art-Net, parallel to first DVI output)		YES	YES	YES
3D Objects on layers, .x files, objects and texture		YES	YES	YES
Softedge on outputs (left/right/top/bottom) Up to 100% Overlap-Region		YES	YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom/linearity)		YES	YES	YES
Recommended Video Format:		DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2
Maximum number of optional input cards (can be freely combined)	1	1	1	1
General 3D Object information				
Maximum of 65000 vertices, .x files, objects have to be set to pivot, objects needs a have a mapped texture.				
DVI-PROCESSOR				
2x DVI-D Dual Link-In (max. 1 meter cable length at input)				
4x3G HD-SDI Outputs (two BNC connectors per output)				
Supported resolutions: 720p50, 720p59, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i60				
4K Display Synchronisation (4 x 2048 x 1080@60hz)				
Built-in EDID Management				
OPTIONAL INPUT CARDS				
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI, Single 3G HD-SDI, Dual 3G HD-SDI, Quad 3G HD-SDI				
OPTIONAL ACCESSORIES				
DMX Link In				
DMX Link Out				
SMPTE-Link				
Net Link I/O solutions for embedding analogue sensors and relays with the media system.				
Widget Designer (for interactive and sensor based applications)				
R3 SERVER HARDWARE PERFORMANCE OVERVIEW				
Mpeg Videos				
720p 1280x720p30 @14Mbit/s	16	20	20	
HD 1920x1080p30 @20Mbit/s	8	10	12	
4K* 4080x2160p30 @80Mbit/s	2	2	2	
4K* 4080x2160p60 @160Mbit/s	1	1	1	
Pandoras Box DDS (Imageseq or MOV)				
HD 1920x1080p30	16	20	24	
4K* 4096x2160p30	2	2	2	
4K* 4096x2160p60	1	1	1	
Pandoras Box DDSA (Imageseq or MOV)				
HD 1920x1080p30	8	10	12	
4K* 4096x2160p30	1	1	1	
Pandoras Box YCoCg				
HD 1920x1080p30	8	10	12	
QT ProRes 422				
HD 1920x1080p30	2	2	2	
AVI Uncompressed				
HD 1920x1080p30	2	2	2	
Pandoras Box BMP imageseq				
HD 1920x1080p30 (SNP)	2	4	4	
HD-SDI Live Input				
1920x1080 i59.94 (De-Interlaced, TopField)	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	0	0	0	
or additional simultaneous DDS 1920x1080p30	2	4	4	
1920x1080 i59.94 (De-Interlaced, TopField)	1	1	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
3G Live Input				
1920x1080 p59.94	4	4	4	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	2	4	4	
or additional simultaneous DDS 1920x1080p30	6	8	8	
1920x1080 p59.94	1	1	1	
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8	
or additional simultaneous DDS 1920x1080p30	16	18	20	
All information contained within this document is subject to change without prior notice. *The same approximate values also apply to UHD 3840x2160 test results.				

GENERAL HARDWARE SPECIFICATION	Compact Player
Physical Dimensions, Compact Player:	
222 x 40 x 165mm (W x H x D), please consult CAD drawings as well.	
Weight: appx. 4 kg	
Server grade hardware components, built for 24/7 use.	
Hard Drive Capacity: Please note that the Pandoras Box installer file itself will require appx. 30GB of your available disk space.	SSD: 120GB
external Power Supply Voltage: 100-240 V	
external Power Supply Wattage:	STBY:1W, Full Load: 65W
Operating System:	Windows 8.1
USB 3.0 Ports	1 Front+ 2 Back
USB 2.0 Ports	2 Back
OUTPUTS & INPUTS	One render output supported
Frontpanel:	2x Audio (1x input, 1x output)
	1x SD Card Reader
Backpanel:	1x eSata
	1x Gigabit Lan
	1x Audio
	1x DVI-I
	1x HDMI
VIDEO	
Maximum Playback Resolution:	
2 x 1920x1080p @ 25/30 fps	
Maximum Output Resolution:	
1920 x 1080 @60p	
Maximum number of video layers:	2
Maximum number of graphics layers:	Unlimited
Maximum number of particle systems:	2
Maximum number of effects:	2 per layer
Base Parameter:	
2D XY, Scale, rotation, position, pivot	YES
Sequences:	0
Network Control:	YES
Embedded Encoder	Optional
Media Format (recommended):	MPEG2
MPEG-1, MPEG-2, MPEG-4, AVI*, WMV, Quicktime*, DDS, JPEG, BMP, TGA, PNG, WAV, MP3, QT*, H.264, JPEG2000 (via Image Converter), *(referring to all codecs included in Windows)	
AUDIO	
Volume Control/Panning	YES**/NO
ASIO Audio	NO
Number of Tracks	0
Synchronized playback on multiple machines.	NO (referring to runtime sync)
KEY FEATURES	
Advanced 3D Projection Mapping	YES
Softedge	YES
Keystone	NO
Synchronized Video Playback on multiple machines.	YES
Genlock	NO
Aeon Effects Engine - A realtime dynamic shader effects engine.	YES
FireFly Particle System	2D
Playlist	YES
Web Browser	YES
Web Server	YES
Art-Net based video pixels to DMX channel mapping.	YES
Multiscreen-Playback	YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES
StreamIX	2
Media Encryption	DECRYPTION ONLY
EMBEDDED CONTENT TOOLS	
Warper:	2D
Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The Warper also supports .3ds and .fbx files.	
Dome Master:	YES
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	
Splitter:	YES
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	
Matrix Patcher:	YES
The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.	
Image Converter:	YES
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.	
Synchronized playback on multiple machines.	YES
TECHNICAL SHOW CONTROL DETAILS	
Master/Client Ability (Master or client)	YES
Synchronized Multiscreen Playback	YES
Video Engine: Full 3D Render Engine	YES
Global video effects on output	YES
Realtime rendering	YES
Remote Control (via PB Manager/Master)	YES
Sequences in Master Mode	0
Sequence Control via SMPTE (SMPTE via Master or Slave)	VIA MASTER
Sequence Control via Art-Net	VIA MASTER
Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control via Art-Net (Patchable)	YES
Control via RS232/422 send/receive (WD/Spark)	YES
Control via MA Net, input only	YES
Control via SACN	YES
MIDI Show Control, input only	YES
Thumbnail Exchange via CIP 1.0	YES

Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)		YES
Warper for 2D mapping		YES
Video Out via Matrix (Art-Net)		YES
3D Objects on layers, .x files, .obj, .fbx, 3ds, objects and texture		YES
Softedge on outputs (left/right/top/bottom)		YES
Up to 100% Overlap-Region		YES
Recommended Video Format:		MPEG2, DDS
General 3D Object information		
Maximum of 65000 vertices, x.files, objects have to be set to pivot, objects needs a have a mapped texture.		
OPTIONAL ACCESSORIES		
DMX Link In+Out,		
Sensor-Link		
Widget Designer (for interactive and sensor based applications)		
Net-Link		
Fibre-Link		
**on video layers		
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coolux Pandoras Box Compact Station
TECH SPECS



GENERAL HARDWARE SPECIFICATION	Compact Station
Physical Dimensions, Compact Station:	
222 x 40 x 165mm (W x H x D), please consult CAD drawings as well.	
Weight: appx. 4 kg	
Server grade hardware components, built for 24/7 use.	
Hard Drive Capacity:	SSD: 120GB
external Power Supply Voltage: 100-240 V	
external Power Supply Wattage:	STBY:1W, Full Load: 65W
Operating System:	Windows 8.1
USB 3.0 Ports	1 Front+ 2 Back
USB 2.0 Ports	2 Back
OUTPUTS & INPUTS	
Frontpanel:	2x Audio (1x input, 1x output)
	1x SD Card Reader
Backpanel:	1x eSata
	1x Gigabit Lan
	1x Audio
	1x DVI-I
	1x HDMI
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Physical Dimensions, Server:			
428 x 178 x 596mm (W x H x D without handles)			
482 x 178 x 649mm (W x H x D with handles)			
Weight: appx. 30 kg			
Case: 4 U 19" Rackmount (optional)			
Server grade hardware components, built for 24/7 use.			
Hard Drive Capacity (redundant memory space/RAID):			
Please note that the Pandoras Box Installer file itself will require appx. 90GB of your available disk space.			
	SSD OPTION: 240 GB/1	SSD OPTION: 480 GB/10	SSD OPTION: 960 GB/10
Power Supply Voltage: 100-240 V			
Power Supply Wattage: 850 W			
Operating System: Windows 8.1			
Front Panel LCD Display			
Mouse/Keyboard (German or English):			
Certifications: CB and ETL			
USB Ports	2+2	2+2	2+2
OUTPUTS			
2x DVI-D Outputs	YES	YES	YES
Art-Net	YES	YES	YES
VIDEO			
Maximum Playback Resolution:			
Playback up to 4K / 8K is possible, performance depends on factors like codecs, compression (where applicable) etc. Special image ratios up to 16K or 32K canvas width are possible with image sequences, depending on overall pixel measurements. If in doubt, please consult with coolux – A Christie company.			
Maximum Output Resolution:			
2560 x 1600 per output.			
Maximum number of video layers:	8	16	Unlimited
Maximum number of graphics layers:	Unlimited	Unlimited	Unlimited
Maximum number of particle systems:	Unlimited	Unlimited	Unlimited
Maximum number of effects:	Unlimited	Unlimited	Unlimited
Base Parameter:			
XYZ, Scale, rotation, position, pivot	YES	YES	YES
Sequences:	1	1	1
Network Control:	YES	YES	YES
Recording (MPEG2, frame accurate recording):	YES	YES	YES
Embedded Encoder	YES	YES	YES
Extensive Media Library	YES	YES	YES
Media Format (recommended):			
Please keep in mind that different types of content will work better with different types of codecs. Please also refer to the performance charts towards the end of this document.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.	AVI uncompressed (SSD), BMP Image Sequences (SSD), DDS Image Sequences (SSD), MPEG2.
General formats: MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended), JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000 (via Image Converter)			
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	8	16	Unlimited
Outputs of build in ASIO sound card.	8	8	8
Synchronized playback on multiple machines.	YES	YES	YES
KEY FEATURES			
Realtime 3D Rendering	YES	YES	YES
Advanced 3D Projection Mapping	YES	YES	YES
Softedge	YES	YES	YES
Keystone	YES	YES	YES
Synchronized Video and Audio Playback on multiple machines.	YES	YES	YES
Genlock	OPTIONAL	OPTIONAL	OPTIONAL
Advanced EDID Management	NO	NO	NO
Aeon Effects Engine	YES	YES	YES
A realtime dynamic shader effects engine.			
FireFly Particle System	YES	YES	YES
Realtime 3D Particle System	YES	YES	YES
Playlist	YES	YES	YES
Art-Net based video pixels to DMX channel mapping.	YES	YES	YES
Venue Sites 3D Pre-Visualisation Tool	YES	YES	YES
Web Server	YES	YES	YES
Web Browser	YES	YES	YES
Multiscreen-Playback	YES	YES	YES
S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D	YES	YES	YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES	YES	YES
StreamIX	8	16	32
Media Encryption	Decryption	Decryption	Decryption
EMBEDDED CONTENT TOOLS			
Warper:	3D	3D	3D
Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The			
Dome Master:	YES	YES	YES
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.			
Splitter:	YES	YES	YES
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.			
Matrix Patcher:	YES	YES	YES
The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.			
Image Converter:	YES	YES	YES
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.			
Synchronized playback on multiple machines.	YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS			
Master/Client Ability (Master or client)	YES	YES	YES
Synchronized Multiscreen Playback	YES	YES	YES
Video Engine: Full 3D Render Engine	YES	YES	YES
Global video effects on output	YES	YES	YES
Realtime rendering	YES	YES	YES
Remote Control (via PB Manager)	YES	YES	YES
Sequences in Master Mode	1	1	1
Sequence Control via SMPTE (SMPTE Master or Slave)	YES	YES	YES
Sequence Control via Art-Net	YES	YES	YES
Layer/Camera Control via Art-Net (Patchable)/Layer/Camera Control via Art-Net (Patchable)	YES	YES	YES
Control via RS232/422 send/receive (WD/Spark)	YES	YES	YES
Control via MA Net, input only	YES	YES	YES
Control via SACN	YES	YES	YES
MIDI Show Control, input only	YES	YES	YES

Thumbnail Exchange via CIP 1.0	YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)	YES	YES	YES
Warper for 3D mapping	YES	YES	YES
Video Out via Matrix (Art-Net, parallel to first DVI output)	YES	YES	YES
3D Objects on layers, .x files, objects and texture	YES	YES	YES
Softedge on outputs (left/right/top/bottom)	YES	YES	YES
Up to 100% Overlap-Region	YES	YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom/linearity)	YES	YES	YES
Maximum number of optional input cards (can be freely combined)	2	2	2
General 3D Object information			
Maximum of 65000 vertices, x.files, objects have to be set to pivot, objects needs a have a mapped texture.			
OPTIONAL INPUT CARDS			
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI			
OPTIONAL ACCESSORIES			
DMX Link In+Out.			
SMPTE-Link			
Sensor-Link			
Widget Designer (for interactive and sensor based applications)			
R3 SERVER HARDWARE PERFORMANCE OVERVIEW			
Mpeg Videos			
720p 1280x720p30 @14Mbit/s	16	20	20
HD 1920x1080p30 @20Mbit/s	8	10	12
4K* 4080x2160p30 @80Mbit/s	2	2	2
4K* 4080x2160p60 @160Mbit/s	1	1	1
Pandoras Box DDS (Imageseq or MOV)			
HD 1920x1080p30	16	20	24
4K* 4096x2160p30	2	2	2
4K* 4096x2160p60	1	1	1
Pandoras Box DDSA (Imageseq or MOV)			
HD 1920x1080p30	8	10	12
4K* 4096x2160p30	1	1	1
Pandoras Box YCoCq			
HD 1920x1080p30	8	10	12
QT ProRes 422			
HD 1920x1080p30	2	2	2
AVI Uncompressed			
HD 1920x1080p30	2	2	2
Pandoras Box BMP imageseq			
HD 1920x1080p30 (SNP)	2	4	4
HD-SDI Live Input			
1920x1080 i59.94 (De-interlaced, TopField)	4	4	4
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	0	0	0
or additional simultaneous DDS 1920x1080p30	2	4	4
1920x1080 i59.94 (De-interlaced, TopField)	1	1	1
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8
or additional simultaneous DDS 1920x1080p30	16	18	20
3G Live Input			
1920x1080 p59.94	4	4	4
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	2	4	4
or additional simultaneous DDS 1920x1080p30	6	8	8
1920x1080 p59.94	1	1	1
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8
or additional simultaneous DDS 1920x1080p30	16	18	20
All information contained within this document is subject to change without prior notice. *The same approximate values also apply to UHD 3840x2160 test results.			

GENERAL HARDWARE SPECIFICATION	DUAL	QUAD
Physical Dimensions, Workstation:		
428 x 178 x 596mm (W x H x D without handles)		
482 x 178 x 649mm (W x H x D with handles)		
Physical Dimensions, DVI-Processor (in case of QUAD Player):		
482 x 44 x 140mm (W x H x D)		
Weight: appx. 30 kg		
Case: 4 or 6 U 19" Rackmount (optional)	optional	optional
Server grade hardware components, built for 24/7 use.		
Hard Drive Capacity (redundant memory space/RAID):	HDD Option: 500 GB/1, SSD Option: 240 GB	HDD Option: 500 GB/1, SSD Option: 240 GB
Please note that the Pandoras Box installer file itself will require appx. 90GB of your available disk space.		
Power Supply Voltage: 100-240 V		
Power Supply Wattage: 650 W		
Operating System: Windows 8.1		
Mouse/Keyboard (German or English):		
USB Ports (one USB Port needed for DVI-Processor)	2+8	2+8
OUTPUTS		
1xDVI-D, 1xDVI/VGA; the QUAD has 4x DVI-D	2	4
2x HD-SDI Outputs (parallel to 2x DVI outputs)	NO	YES
HD PLAYBACK (720p)	4	8
Art-Net	YES	YES
VIDEO		
Maximum Playback Resolution:	4080x2160@30p as MXL 1 1920x1080@30/25p: 4 1280x720@30/25p: 4 SD PAL/NTSC Clips: 4	4080x2160@30p as MXL 1 1920x1080@30/25p: 4 1280x720@30/25p: 8 SD PAL/NTSC Clips: 8
Maximum Output Resolution:	2560 x 1600	2048 x 1080
Maximum number of video layers:	4	8
Maximum number of graphics layers:	Unlimited	Unlimited
Maximum number of effects:	2	4
Base Parameter:		
Scale, rotation, position, pivot	XY	XY
Sequences:	1	1
Media Format (recommended):	MPEG2	MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended), JPEG, JPEG2000, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000 *(referring to all codecs included in Windows)		
AUDIO		
Volume Control/Panning	YES	YES
ASIO Audio	YES	YES
Number of Tracks	4	8
Output depending on ASIO sound card.		
Synchronized playback on multiple machines.	YES	YES
KEY FEATURES		
Realtime 2D Rendering	YES	YES
Advanced 3D Projection Mapping	YES	YES
Softedge	YES	YES
Keystone	YES	YES
Synchronized Video and Audio Playback on multiple machines.	YES	YES
Genlock	OPTIONAL	OPTIONAL
Advanced EDID Management (QUAD Player only)	NO	YES
Aeon Effects Engine	YES	YES
A realtime dynamic shader effects engine.	2D	2D
Playlist	YES	YES
Art-Net based video pixels to DMX channel mapping.	YES	YES
Web Server	YES	YES
Web Browser	YES	YES
Multiscreen-Playback	YES	YES
StreamIX	4	8
Media Encryption	Decryption	Decryption
EMBEDDED CONTENT TOOLS		
Warper:		
Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection	2D	2D
Dome Master:	YES	YES
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.		
Splitter:	YES	YES
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.		
Matrix Patcher:	YES	YES
The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.		
Image Converter:	YES	YES
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.		
Synchronized playback on multiple machines.	YES	YES
TECHNICAL SHOW CONTROL DETAILS		
Master/Client Ability (Master or client)	YES	YES
Synchronized Multiscreen Playback	YES	YES
Video Engine: Full 2D Render Engine	YES	YES
Global video effects on output	YES	YES
Realtime rendering	YES	YES
Remote Control (via PB Manager)	YES	YES
Sequences in Master Mode	1	1
Sequence Control via SMPTE (SMPTE Master or Slave)	YES	YES
Sequence Control via Art-Net	YES	YES
Layer/Camera Control via Art-Net (Patchable)	YES	YES
Control via RS232/422 send/receive (WD/Spark)	YES	YES
Control via MA Net, input only	YES	YES
Control via SACN	YES	YES
MIDI Show Control, input only	YES	YES
Thumbnail Exchange via CIP 1.0	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)	YES	YES
Warper for 3D Keystone	YES	YES

Video Out via Matrix (Art-Net, parallel to first DVI output)	YES	YES
3D Objects on layers, .x files, objects and texture	YES	YES
Softedge on outputs (left/right/top/bottom) Up to 100% Overlap-Region	YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom(linearity)	YES	YES
Recommended Video Format:	MPEG2	MPEG2
Maximum number of optional input cards (can be freely combined)	1	1
General 3D Object information		
Maximum of 65000 vertices, .x.files, objects have to be set to pivot, objects needs a have a mapped texture.		
DVI-PROCESSOR (QUAD PLAYER ONLY)		
2x DVI-D Dual Link-In (max. 1 meter cable length at input)		
4xDVI-D Single Link Out		
Supported resolutions: PAL, NTSC, 720p50, 720p59, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p25, 1080p29.97, 1080p30, 1080i50, 1080i60		
2K Display Support		
2K Display Synchronisation (2 x 2048 x 1080@60hz)		
Built-in EDID Management	NO	YES
OPTIONAL INPUT CARDS		
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI,		
OPTIONAL ACCESSORIES		
DMX Link In+Out,		
SMPT-E-Link		
Sensor-Link		
Widget Designer (for interactive and sensor based applications)		
All information contained within this document is subject to change without prior notice.		



coolux Pandoras Box
EDITOR
TECH SPECS



GENERAL INFORMATION	EDITOR
Operating System: Windows 8.1	
Recommended Hardware: Recommended Hardware: Intel Quad Core 3,2 GHz, RAID System (Raid 1, Mirror) 2 hard drives, 500 GB useable space	
Number of Outputs:	NONE
VIDEO	
Maximum Output Resolution:	Depends on Hardware
Maximum number of video layers:	Unlimited
Maximum number of graphics layers:	Unlimited
Maximum number of sequences:	Unlimited
Maximum number of particle systems:	Unlimited
Maximum number of effects:	Unlimited
Base Parameter:	
XYZ, Scale, rotation, position, pivot	YES
Sequences:	Unlimited
Network Control:	NO
Recording (MPEG2, frame accurate recording):	YES
Extensive Media Library	YES
Media Format (recommended):	MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS, JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, *(referring to all codecs included in Windows)	
AUDIO	
Volume Control/Panning	YES
ASIO Audio	YES
Number of Tracks	32
Output depending on ASIO sound card.	
Synchronized playback on multiple machines.	NO
KEY FEATURES	
Realtime 3D Rendering	YES
Advanced 3D Projection Mapping	YES
Softedge	YES
Keystone	YES
Synchronized Video and Audio Playback on multiple machines.	NO
Genlock:	OPTIONAL
Advanced EDID Management	NO
Aeon Effects Engine - A realtime dynamic shader effects engine.	YES
FireFly Particle System	YES
Playlists	YES
Realtime 3D Particle System	YES
Art-Net based video pixels to DMX channel mapping.	YES
Multiscreen-Playback	YES
S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D	YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES
Media Encryption	Encryption/Decryption
EMBEDDED CONTENT TOOLS	
Warper:	YES
Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping.	
Dome Master:	YES
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	
Splitter:	YES



coolux Pandoras Box
EDITOR
TECH SPECS



The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.		
Image Converter:		YES
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.		YES
Synchronized playback on multiple machines.		YES
TECHNICAL SHOW CONTROL DETAILS		
Preview Engine:		Full 3D Render Engine
Global video effects on output		YES
Realtime rendering		YES
Sequence Control via SMPTE (SMPTE Master or Slave)		YES
Sequence Control via Art-Net		YES
Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control via Art-Net (Patchable)		YES
Control via RS232/422 send/receive (WD/Spark)		YES
Control via MA Net, input only		YES
Control via SACN		YES
MIDI Show Control, input only		YES
Thumbnail Exchange via CIP 1.0		YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)		YES
Warper for 3D Keystone		YES
3D Objects on layers, .x files, objects and texture		YES
Recommended Video Format:		MPEG2
All information contained within this document is subject to change without prior notice.		

DVI-SINGLE INPUT CARD	DVI-DUAL INPUT CARD
DVI-A (analog)	DVI-A (analog)
640x480@60Hz	640x480@60Hz
640x480@62Hz	640x480@62Hz
640x480@72Hz	640x480@72Hz
640x480@75Hz	640x480@75Hz
640x480@85Hz	640x480@85Hz
720x400@56Hz	720x400@56Hz
800x600@56Hz	800x600@56Hz
800x600@60Hz	800x600@60Hz
800x600@72Hz	800x600@72Hz
800x600@75Hz	800x600@75Hz
800x600@85Hz	800x600@85Hz
1024x768@60Hz	1024x768@60Hz
1024x768@70Hz	1024x768@70Hz
1024x768@75Hz	1024x768@75Hz
1024x768@85Hz	1024x768@85Hz
1280x1024@60Hz	1280x1024@60Hz
1280x1024@75Hz	1280x1024@75Hz
1600x1200@60Hz	1600x1200@60Hz
1920x1080@60Hz	1920x1080@60Hz
DVI-D (digital)	DVI-D (digital)
640x480@60Hz	640x480@60Hz
640x480@62Hz	640x480@62Hz
640x480@72Hz	640x480@72Hz
640x480@75Hz	640x480@75Hz
640x480@85Hz	640x480@85Hz
720x400@56Hz	720x400@56Hz
800x600@56Hz	800x600@56Hz
800x600@60Hz	800x600@60Hz
800x600@72Hz	800x600@72Hz
800x600@75Hz	800x600@75Hz
800x600@85Hz	800x600@85Hz
1024x768@60Hz	1024x768@60Hz
1024x768@70Hz	1024x768@70Hz
1024x768@75Hz	1024x768@75Hz
1024x768@85Hz	1024x768@85Hz
1280x1024@60Hz	1280x1024@60Hz
1280x1024@75Hz	1280x1024@75Hz
1600x1200@60Hz	1600x1200@60Hz
1920x1080@60Hz	1920x1080@60Hz
1920x1200@60Hz	
2048x1536@75Hz	DVI-D Duallink with second input disabled:
2048x1536@60Hz	1920x1200@60Hz
2560x1600@60Hz	2048x1536@75Hz
	2048x1536@60Hz
	2560x1600@60Hz

[illegible]

GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Operating System: Windows 8.1			
Recommended Hardware: Recommended Hardware: Intel Quad Core 3,2 GHz, RAID System (Raid 1, Mirror) 2 hard drives, 500 GB useable space			
VIDEO			
Sequences:	2	8	Unlimited
Network Control:	YES	YES	YES
Video Export:	YES	YES	YES
Recording (MPEG2, frame accurate recording)	YES	YES	YES
Media Format (recommended): MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended), JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000 *(referring to all codecs included in Windows)	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	8	16	Unlimited
Output depending on ASIO sound card.			
Synchronized playback on multiple machines.	YES	YES	YES
Playlist	YES	YES	YES
EMBEDDED CONTENT TOOLS			
Warper: Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping.	3D	3D	3D
Dome Master: The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	YES	YES	YES
Splitter: The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	YES	YES	YES
Image Converter: The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.	YES	YES	YES
Synchronized playback on multiple machines.	YES	YES	YES
Matrix Patcher: The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.	YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS			
Synchronized Multiscreen Playback	YES	YES	YES
Preview Engine: Full 3D Render Engine	YES	YES	YES
Global video effects on output	YES	YES	YES
Realtime rendering	YES	YES	YES
Venue Sites 3D Pre-Visualisation Tool	YES	YES	YES
Media Encryption	Encryption/Decryption	Encryption/Decryption	Encryption/Decryption
Sequence Control via SMPTE (SMPTE Master or Slave)	YES	YES	YES
Remote Control (via PB Manager)	YES	YES	YES
Sequence Control via Art-Net	YES	YES	YES
Layer/Camera Control via Art-Net (Patchable)	YES	YES	YES
Control via RS232/422 send/receive (WD/Spark)	YES	YES	YES
Control via MA Net, input only	YES	YES	YES
Control via SACN	YES	YES	YES
MIDI Show Control, input only	YES	YES	YES
Thumbnail Exchange via CIP 1.0	YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)	YES	YES	YES
Warper for 3D Keystone	YES	YES	YES
All information contained within this document is subject to change without prior notice.			



coolux Pandoras Box
OFFLINE MANAGER
TECH SPECS



GENERAL HARDWARE SPECIFICATION	OFFLINE MANAGER
Operating System: Windows 8.1	
Recommended Hardware: Recommended Hardware: Intel Quad Core 3,2 GHz, RAID System (Raid 1, Mirror), 2 hard drives, 500 GB useable space	
VIDEO	
Sequences:	Unlimited
Network Control:	NO
Video Export:	NO
Recording (MPEG2, frame accurate recording)	NO
Media Format (recommended):	DDS Image Sequences (SSD), MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended) JPEG, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, *(referring to all codecs included in Windows)	
AUDIO	
Volume Control/Panning	YES
ASIO Audio	YES
Number of Tracks	32
Output depending on ASIO sound card.	
Synchronized playback on multiple machines.	NO
PLAYLIST	YES
EMBEDDED CONTENT TOOLS	
Warper:	
Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping.	YES
Dome Master:	
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	YES
Splitter:	
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	YES
Image Converter:	
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.	YES
Synchronized playback on multiple machines.	NO
TECHNICAL SHOW CONTROL DETAILS	
Synchronized Multiscreen Playback Preview	YES
Preview Engine: Full 3D Render Engine	YES
Global video effects on output	YES
Venue Sites 3D Pre-Visualisation Tool	YES
Media Encryption	Decryption
Realtime rendering (Preview only)	YES
Sequence Control via SMPTE (SMPTE Master or Slave)	NO
Remote Control (via PB Manager)	NO
Sequence Control via Art-Net	YES
Layer/Camera Control via Art-Net (Patchable)	YES
Control via RS232/422 send/receive (WD/Spark)	YES
Control via MA Net, input only	YES
Control via SACN	YES
MIDI Show Control, input only	YES
Thumbnail Exchange via CIP 1.0	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)	NO
Warper for 3D Keystone	YES
All information contained within this document is subject to change without prior notice.	

GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Operating System: Windows 8.1			
Recommended Hardware: Recommended Hardware: Intel Quad Core 3,2 GHz, RAID System (Raid 1, Mirror) 2 hard drives, 500 GB useable space			
Number of Outputs	1	1	1
DVI/VGA Output	Depends on Hardware		
Art-Net	YES	YES	YES
VIDEO			
Maximum Playback Resolution:	1920x1080	1920x1080	4080x2160 @30fps MXL
Maximum number of video layers:	1	2	4
Maximum number of graphics layers:	Unlimited	Unlimited	Unlimited
Maximum number of effects:	NONE	2	4
Base Parameter:	XY	XY	XY
Sequences:	NONE	1	1
Show control standalone	NO	YES	YES
Network Control:	YES	YES	YES
Encoder	Optional	Optional	Optional
Video Input	DirectShow	DirectShow	DirectShow
Media Format (recommended):	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended), JPEG, JPEG2000, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, *(referring to all codecs included in Windows)			
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	1	2	4
Output depending on ASIO sound card.			
Synchronized playback on multiple machines	YES	YES	YES
KEY FEATURES			
Advanced Projection Mapping	YES	YES	YES
Softedge	NO	YES	YES
Keystone	NO	NO	YES
FireFly Particle Engine	NO	2D	2D
Playlist	YES	YES	YES
Web Server	YES	YES	YES
Web Browser	YES	YES	YES
EMBEDDED CONTENT TOOLS			
Warper:			

Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping.	2D	2D	2D
Dome Master:			
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	YES	YES	YES
Splitter:			
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	YES	YES	YES
Matrix Patcher:			
The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.	YES	YES	YES
Image Converter:			
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.	YES	YES	YES
Synchronized playback on multiple machines.	YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS			
Master/Client Ability (Master or client)	YES	YES	YES
Synchronized Multiscreen Playback	YES	YES	YES
Video Engine: Full 2D Render Engine	YES	YES	YES
Global video effects on output	NO	YES	YES
StreamiX	1	2	4
Media Encryption	Decryption	Decryption	Decryption
Realtime rendering	YES	YES	YES
Remote Control (via PB Manager)	YES	YES	YES
Sequences in Master Mode	0	1	1
Sequence Control via Art-Net	NO	YES	YES
Layer/Camera Control via Art-Net (Patchable)	YES	YES	YES
Control via RS232/422 send/receive (WD/Spark)	YES	YES	YES
Control via MA Net, input only	YES	YES	YES
Control via SACN	YES	YES	YES

MIDI Show Control, input only	YES	YES	YES
Thumbnail Exchange via CITP 1.0	YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)	YES	YES	YES
Warper for 2D mapping	YES	YES	YES
Video Out via Matrix (Art-Net, parallel to first DVI output)	YES	YES	YES
3D Objects on layers, .x files, objects and texture	YES	YES	YES
Softedge on outputs (left/right/top/bottom) Up to 100% Overlap-Region	NO	YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom(linearity))	NO	NO	YES
Recommended Video Format:	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2
Maximum number of optional input cards (can be freely combined inside coolux hardware)	1	1	1
All information contained within this document is subject to change without prior notice.			

GENERAL HARDWARE SPECIFICATION	LT	STD	PRO
Physical Dimensions, Server:			
428 x 178 x 596mm (W x H x D without handles)			
482 x 178 x 649mm (W x H x D with handles)			
Physical Dimensions, DVI-Processor:			
482 x 44 x 140mm (W x H x D)			
Weight: approx. 30 kg			
Case: 6 U 19" Rackmount (optional)			
Server grade hardware components, built for 24/7 use.			
Hard Drive Capacity (redundant memory space/RAID):			
Please note that the Pandoras Box installer file itself will require approx. 90GB of your available disk space.	SSD OPTION: 240 GB	SSD OPTION: 480 GB	SSD OPTION: 960 GB
Power Supply Voltage: 100-240 V			
Power Supply Wattage: 850 W			
Operating System: Windows 8.1			
Front Panel LCD Display			
Mouse/Keyboard (German or English):			
Certifications: CB and ETL			
USB Ports (one USB Port needed for DVI-Processor)	2+2	2+2	2+2
OUTPUTS			
4xDVI-D Output	YES	YES	YES
2x3G HD-SDI Outputs (parallel to 2xDVI Outputs)	YES	YES	YES
Art-Net	YES	YES	YES
VIDEO			
Maximum Playback Resolution:			
Playback up to 4K / 8K is possible, performance depends on factors like codecs, compression (where applicable) etc.			
Special image ratios up to 16K or 32K canvas width are possible with image sequences, depending on overall pixel measurements. If in doubt, please consult with coolux – A Christie company.			
Maximum Output Resolution:			
2048 x 1080 per output.			
Maximum number of video layers:	8	16	Unlimited
Maximum number of graphics layers:	Unlimited	Unlimited	Unlimited
Maximum number of particle systems:	Unlimited	Unlimited	Unlimited
Maximum number of effects:	Unlimited	Unlimited	Unlimited
Base Parameter:			
XYZ, Scale, rotation, position, pivot	YES	YES	YES
Sequences:	1	1	1
Network Control:	YES	YES	YES
Recording (MPEG2, frame accurate recording):	YES	YES	YES
Embedded Encoder	YES	YES	YES
Extensive Media Library	YES	YES	YES
Media Format (recommended):	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2	DDS Image Sequences (SSD), MPEG2
MPEG-1, MPEG2, AVI, WMV, Quicktime*, 4K MXL, DDS (SSD strongly recommended), JPEG, JPEG2000, .3DS, . FBX, BMP, TGA, PNG, WAV, MP3, MPEG4, QT, H.264, JPEG2000			
* (referring to all codecs included in Windows)			
AUDIO			
Volume Control/Panning	YES	YES	YES
ASIO Audio	YES	YES	YES
Number of Tracks	8	16	Unlimited
Outputs of build in ASIO sound card.	8	8	8
Synchronized playback on multiple machines.	YES	YES	YES
KEY FEATURES			
Realtime 3D Rendering	YES	YES	YES
Advanced 3D Projection Mapping	YES	YES	YES
Softedge	YES	YES	YES
Keystone	YES	YES	YES
Synchronized Video and Audio Playback on multiple machines.	YES	YES	YES
Genlock	OPTIONAL	OPTIONAL	OPTIONAL
Advanced EDID Management	YES	YES	YES
Aeon Effects Engine	YES	YES	YES
A realtime dynamic shader effects engine.			
Playlist	YES	YES	YES
FireFly Particle System	YES	YES	YES
Realtime 3D Particle System	YES	YES	YES
Art-Net based video pixels to DMX channel mapping.	YES	YES	YES
Multiscreen-Playback	YES	YES	YES
Venue Sites 3D Pre-Visualisation Tool	YES	YES	YES
S3D Stereoscopy/ Active 3D/ passive 3D/ Side by Side 3D	YES	YES	YES
Web Browser	YES	YES	YES
FluidFrame: A frame blending algorithm that allows smooth cross conversion and can take any input and output frame rate.	YES	YES	YES
StreamIX	8	16	32
Media Encryption	Decryption	Decryption	Decryption
EMBEDDED CONTENT TOOLS			
Warper:			
Using the Warper it is easy to apply textures to complex curved and shaped screens. With this tool it is possible to project onto regular 3D surfaces like a dome or sphere and realize amazing 360° projections. The Warper is an indispensable and advanced tool when it comes to cutting edge projection mapping. It also includes a 3D marker calibration mode to save valuable production time. The Warper also supports .3ds and .fbx files.	3D	3D	3D
Dome Master:			
The Dome Master is a spherical map converter that allows the conversion of dome master files into spherical map files.	YES	YES	YES
Splitter:			
The Splitter is an extremely useful tool for splitting image sequences into multiple parts, that can then be distributed as a large master file over multiple servers. Perfect for panoramic projections and/or dome projections.	YES	YES	YES
Matrix Patcher:	YES	YES	YES
The Matrix Patcher is an important tool for special applications where LED or lighting fixtures are required to be patched to individual pixels.			
Image Converter:			
The Image Converter makes high performance image batch conversions possible and can turn image sequences into video files.	YES	YES	YES
Synchronized playback on multiple machines.	YES	YES	YES
TECHNICAL SHOW CONTROL DETAILS			
Master/Client Ability (Master or client)	YES	YES	YES
Synchronized Multiscreen Playback	YES	YES	YES
Video Engine: Full 3D Render Engine	YES	YES	YES
Global video effects on output	YES	YES	YES
Realtime rendering	YES	YES	YES
Remote Control (via PB Manager)	YES	YES	YES
Sequences in Master Mode	1	1	1
Sequence Control via SMPTE (SMPTE Master or Slave)	YES	YES	YES
Sequence Control via Art-Net	YES	YES	YES
Layer/Camera Control via Art-Net (Patchable)Layer/Camera Control via Art-Net (Patchable)	YES	YES	YES
Control via RS232/422 send/receive (WD/Spark)	YES	YES	YES
Control via MA Net, input only	YES	YES	YES
Control via SACN	YES	YES	YES
MIDI Show Control, input only	YES	YES	YES
Thumbnail Exchange via CIP 1.0	YES	YES	YES
Programming of DMX Devices (via Art-Net or optional DMX-Link In-Out device)	YES	YES	YES
Warper for 3D mapping	YES	YES	YES
Video Out via Matrix (Art-Net, parallel to first DVI output)	YES	YES	YES
3D Objects on layers, .x files, objects and texture	YES	YES	YES
Softedge on outputs (left/right/top/bottom) Up to 100% Overlap-Region	YES	YES	YES
Keystone on outputs, 16Bit, left/right(top/bottom(linearity)	YES	YES	YES
Maximum number of optional input cards (can be freely combined)	2	2	2
General 3D Object information			
Maximum of 65000 vertices, x.files, objects have to be set to pivot, objects needs a have a mapped texture.			
DVI-PROCESSOR			

2x DVI-D Dual Link-In (max. 1 meter cable length at input)			
4xDVI-D Single Link Out			
2x3G HD-SDI Outputs (parallel to 2xDVI Outputs)			
Supported resolutions: PAL, NTSC, 720p50, 720p59, 720p59.94, 720p60, 1080p23.98, 1080p24, 1080p25, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p60			
4K Display Synchronisation (4 x 2048 x 1080@60hz)			
Built-in EDID Management			
OPTIONAL INPUT CARDS			
Single DVI, Dual DVI, Single HD-SDI, Dual HD-SDI			
OPTIONAL ACCESSORIES			
DMX Link In+Out,			
SDI-Link			
Sensor-Link			
Widget Designer (for interactive and sensor based applications)			
R3 SERVER HARDWARE PERFORMANCE OVERVIEW			
Mpeg Videos			
720p 1280x720p30 @14Mbit/s	16	20	20
HD 1920x1080p30 @20Mbit/s	8	10	12
4K* 4080x2160p30 @80Mbit/s	2	2	2
4K* 4080x2160p60 @160Mbit/s	1	1	1
Pandoras Box DDS (Imageseq or MOV)			
HD 1920x1080p30	16	20	24
4K* 4096x2160p30	2	2	2
4K* 4096x2160p60	1	1	1
Pandoras Box DDSA (Imageseq or MOV)			
HD 1920x1080p30	8	10	12
4K* 4096x2160p30	1	1	1
Pandoras Box YCoCg			
HD 1920x1080p30	8	10	12
QT ProRes 422			
HD 1920x1080p30	2	2	2
AVI Uncompressed			
HD 1920x1080p30	2	2	2
Pandoras Box BMP imageeq			
HD 1920x1080p30 (SNP)	2	4	4
HD-SDI Live Input			
1920x1080 i59.94 (De-interlaced, TopField)	4	4	4
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	0	0	0
or additional simultaneous DDS 1920x1080p30	2	4	4
1920x1080 i59.94 (De-interlaced, TopField)	1	1	1
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8
or additional simultaneous DDS 1920x1080p30	16	18	20
3G Live Input			
1920x1080 p59.94	4	4	4
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	2	4	4
or additional simultaneous DDS 1920x1080p30	6	8	8
1920x1080 p59.94	1	1	1
additional simultaneous mpeg 1920x1080p30@20 Mbit/s	6	8	8
or additional simultaneous DDS 1920x1080p30	16	18	20
All information contained within this document is subject to change without prior notice. *The same approximate values also apply to UHD 3840x2160 test results.			

TOOLS	STD	STD	PRO	ULT
		PLAYBACK		
AirScan			YES	YES
Kinect (Win7 only!!!)			YES	YES
Web Server	YES	YES	YES	YES
- Synchronized Pages	NO	NO	YES	YES
- Multi Session	NO	NO	NO	YES
Connection Manager	YES	YES	YES	YES
ArtNet Monitor	YES	YES	YES	YES
Remoting	YES	YES	YES	YES
Events	YES	YES	YES	YES
Keyboard Input	YES	YES	YES	YES
Macro		YES	YES	YES
Midi Input	YES	YES	YES	YES
Variables		YES	YES	YES
Blacklist		YES	YES	YES
Email Settings		YES	YES	YES
RSS Settings		YES	YES	YES
SMS Settings		YES	YES	YES
Face Tracking			YES	YES
Motion Detector			YES	YES
Camera Point Tracker			YES	YES
Phidgets			YES	YES
Add Graphic Layer (PBV5 only)	YES	YES	YES	YES
Cue Generator	YES	YES	YES	YES
Video Logger			YES	YES
Default Image Settings	YES	YES	YES	YES
Image Resource Manager	YES	YES	YES	YES
CONTROLS				
Page	YES	YES	YES	YES
Nodes		YES	YES	YES
Buttons:				
Full/Half/Quarter size	YES, v4.7	YES, v4.7	YES, v4.7 only	YES
Custom Script	YES	YES	YES	YES
Script Timer			YES	YES
Media Control	YES	YES	YES	YES
Cue Control	YES	YES	YES	YES
ImageLoader		YES*	YES	YES
Video Snapshot		YES*	YES	YES
ArtNet Snapshot		YES*	YES	YES
ArtNet Recorder		YES*	YES	YES
Scroller Horizontal			YES	YES
Scroller Vertical			YES	YES
Flip Switch Horizontal			YES	YES
Flip Switch Vertical			YES	YES
Analog Clock	YES	YES	YES	YES
CueList	YES	YES	YES	YES
Digital Clock	YES	YES	YES	YES
Displays (general)		YES*	YES	YES
Displays Motion Mask			YES	YES
Drop Down List	YES	YES	YES	YES
Event Viewer	YES	YES	YES	YES
Fader:				

Horizontal	YES	YES	YES	YES
Vertical	YES	YES	YES	YES
ColourPicker	YES	YES	YES	YES
Encoder	YES	YES	YES	YES
Wheel horizontal	YES	YES	YES	YES
Wheel vertical	YES	YES	YES	YES
Image/Picture Box	YES	YES	YES	YES
Label	YES	YES	YES	YES
List View (MS Excel)			YES	YES
Panels:			YES	YES
Multitouch			YES	YES
Drawing Canvas			YES	YES
XY Panel	YES	YES	YES	YES
Play list			YES	YES
Shapes	YES	YES	YES	YES
Text Input	YES	YES	YES	YES
Textbox	YES	YES	YES	YES
Timecode	YES	YES	YES	YES
Tree View	YES	YES	YES	YES
Video Player		YES*	YES	YES
VNC Panel	YES	YES	YES	YES
Web browser		YES*	YES	YES
* properties can be edited.				
NODES - PRO and ULT ONLY				
Input Nodes:				
AIRBAR				
AIRSCAN				
AIRSCAN MULTI-POINT				
ART-NET				
AUDIO				
AUDIO PROCESSOR				
BLACK BOX (BETA)				
CAMERA POINT TRACKER				
CLOCK				
COLOUR PICKER				
COM PORT				
COM QUERY STRING				
COM STATUS				
COM ASCII STREAM				
COUNT DOWN				
COUNTER				
DMX LINK IN				
EMAIL				
ENCODER				
EVENTS				
EXCEL READER				
FACE TRACKING				
FADER				
FADER EXTENSION				
iPHONE REMOTE				
GPS				
JOYSTICK				
KINECT				

KINESYS K2				
LABEL				
MEDIA CONTROL				
MIDI IN				
MIDI NOTE CATCH				
MOTION DETECTOR				
MOUSE				
MULTI-TOUCH ITEM (not available in PB Version 5)				
MULTI-TOUCH PANEL POINT				
NATURAL POINT MARKER				
ODSL 30				
Controls:				
OSC				
PAGE				
PB DEVICE PARAMETER				
PHIDGET HS ENCODER (1047)				
PING				
RANDOM				
REMOTE TOUCH ITEM				
RSS				
SENSOR LINK				
SERIAL LINK GPI				
SMS				
SPACE NAVIGATOR				
SMPTE LINK				
TEXTBOX				
TEXT READER				
TIMAX				
TCP STATUS				
TCP				
TCP ASCII STREAM				
TCP QUERY STRING				
TRACKSCAN				
TRACKSCAN SERIAL LINK				
UDP STATUS				
UDP				
UDP ASCII STREAM				
VALUE				
VARIABLE				
WATCH FOLDER				
WHEEL				
WII				
XY Panel				
Filter Nodes:				
ADD RELATIVE				
ANGLE DISTANCE				
ANGLE TO POINT				
COMPARE				
DAMPING PREDICTION				
DAMPING TIMED				
DELAY				
DELTA				
DYNAMIC TRIGGER				
IF				
IS IN BOUNDING BOX				
IS IN RANGE				
JITTER REDUCE				
MAX				

MIN				
POLAR > RECTANGULAR				
PREDICTION				
RANGE ASSYMETRIC				
RANGE				
Math Nodes:				
ABS				
ACOS				
ADD				
ASIN				
ATAN				
CEILING				
COS				
DEGREE > RADIANS				
DIVIDE				
FLOOR				
LOG				
MODULO				
MULTIPLY				
PERCENT				
POWER X^Y				
RADIANS>DEGREE				
ROUND				
SIN				
SQRT				
SUBTRACT				
SUM				
TAN				
Text Nodes:				
COMPARE TEXT				
CONTAINS TEXT				
DATE TO TEXT				
LEADING ZEROS				
TEXT COMBINER				
TEXT NODES VECTOR:				
DISTANCE 1D				
DISTANCE 2D				
DISTANCE 3D				
Output Nodes:				
ANGULAR DISPLAY				
ART-NET				
BAR GRAPH				
COM PORT MESSAGE				
COM PORT ASCII STREAM				
DIGITAL DISPLAY				
DMX LINK OUT				
EXCEL WRITER				
FADER				
LABEL				
MIDI NOTE ON/OFF				
MIDI RAW MESSAGE				
MIDI VALUE				
MOUSE				
PAGE				
PB DEVICE CONTROL				



coolux Pandoras Box
Widget Designer



PB LAYER				
PB LAYER SHUFFLE				
PB SEQUENCE CONTROL				
PB SEQUENCE SEEK				
PB TEXT				
PB TEXT UNICODE				
SCRIPT				
SERIAL LINK				
TCP MESSAGE				
TCP ASCII STREAM				
TEXTBOX				
UDP MESSAGE				
UDP ASCII STREAM				
VALUE				
VARIABLE				
VIDEO PLAYER TIME				
VIDEO PLAYER VOLUME				
Script Nodes:				
COM				
TCP				
UDP				
PHIDGET IR				
PHIDGET RFID				
Please note: STD PLAYBACK refers to the playback capabilities of the Widget Designer STD. It is not an additional product.				
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GENERAL HARDWARE INFORMATION
Physical Dimensions, Workstation:
428 x 178 x 596mm (W x H x D without handles)
482 x 178 x 649mm (W x H x D with handles)
Weight: appx. 30 kg
Case: 4 U 19" Rackmount (optional), Server grade hardware components, built for 24/7 use.
Hard Drive Capacity (usable space/RAID): 500 GB/1 , Please note that the Pandoras Box installer file itself will require appx. 90GB of your available disk space.
Power Supply Voltage: 100-240 V
Power Supply Wattage: 650 W
Mouse/Keyboard (German or English)
USB Ports (2.0): 2 on front +8 at the back
Intel Mainboard
Quad Core 3,2 GHz
Graphics Card: 1280MB RAM with Pixel Shader/Vertex Shader 3.0
4GB RAM
Maximum number of simultaneous video playback streams:
1x 4080x2160@30p as MXL 1920x1080@30/25p: 4 1280x720@30/25p: 4 SD PAL/NTSC Clips: 4
Maximum number of simultaneous video streams available for preview in Preview mode:
1920x1080@30/25p: 4 1280x720@30/25p: 4 SD PAL/NTSC Clips: 4
Outputs: 1xDVI-D, 1xDVI/VGA
GENERAL SOFTWARE INFORMATION
Operating System: Windows 8.1
DirectX 9
Quicktime player if mov files are used
All current Windows Updates
All information contained within this document is subject to change without prior notice.