



# PIXERA four RS

Basic technical specifications



Product	PIXERA four RS
Available models	PIXERA four RS
Art. Nr.	PX4-RS
<b>Physical</b>	
Case Dimension (WxDxH)	445 x 482 x 176mm
Max. Product Dimension (WxDxH)*	484 x 550 x 176mm
Product Weight	18,5kg
<b>Hardware</b>	
Server Grade Hardware Components	Yes
CPU Type	AMD Epyc
CPU Performance Index	68
CPU # of Cores / # of Threads	24/48
CPU Min/Max Frequency	2,85/4,0GHz
RAM	128GB
RAM Channels used	8
ECC RAM	Yes
<b>Power</b>	
Power Supply	100-240VAC, 50-60Hz
Power Consumption Peak	900W
Power Consumption Average (with High Load*)	600W (Value higher with optional upgrades*)
Redundant Power Supply Hot-Plug	Yes
Heat Dissipation Peak	3071BTU/h
Heat Dissipation Average with High Load*)	1535BTU/h (Value higher with optional upgrades*)
<b>Operating System Storage</b>	
Operating System Amount of Physical NVMEs	1
Operating System Capacity (Net)	500GB
Operating System RAID Level	-

<b>Data Storage NVMe SSD Onboard</b>	
Data NVMe Capacity (Net)	15TB (Optional: 30TB, 60TB)
Data NVMe Max. Constant Read Rate	10GB/s (Up to 20GB/s)
Playback Duration Uncompressed Content (Single Stream)	156,3min (4k60) (Optional up to 625min)
<b>Video Outputs</b>	
Licensed Video Outputs	1-2   3-4
Physical Video Outputs	4
Video Output Standard	DP1.4
Video Output Resolution (Max.)	5120x2880 @ 60Hz
EDID Management	Yes
Genlock	Yes
Framelock	Yes
<b>GUI Outputs</b>	
GUI Outputs	Optional
GUI Output Standard	Optional (4x mDP1.4)
Max GUI Output Resolution	Optional (4096x2160 @ 60Hz)
<b>Connection</b>	
USB	2x USB3 Front, 1x USB-C Front, 2x USB3 Rear, 1x USB-C Rear
Network	4x1 Gbps 2x 10Gbps 2x 25Gbps
IPMI	1x IPMI LAN
<b>Video Inputs (Not all configs possible*)</b>	
HDMI	1xHDMI 2.0 in
3G-SDI	4x3G SDI I/O or 1x12G SDI I/O
12G-SDI	1x12G SDI I/O or 4x3G SDI I/O
<b>Audio Outputs (Not all configs possible*)</b>	
Analog Balanced	Stereo Output (2x quarter-inch TRS jack)
SPDIF	Optional
AES/EBU	Optional
Dante Soundcard	Optional
Dante virtual soundcard	Yes
<b>Environmental Specifications - Operating</b>	
Temperature (altitude less than 1000m, no direct sunlight)	10°C to 30°C
Maximum Temperature Gradation	10°C per hour
Temperature De-Rating (altitude more than 1000m)	Reduce max. temp. by 1°C per 300m
Maximum Altitude	3000m
Relative Humidity (noncondensing)	20% RH to 80% RH
Maximum Humidity Gradation	10% RH per hour

<b>Environmental Specifications -Storage</b>	
Temperature (no direct sunlight)	-30°C to 55°C
Maximum Temperature Gradation	20°C per hour
Relative Humidity (noncondensing)	5% RH to 95% RH
Maximum Humidity Gradation	10% RH per hour
<b>General</b>	
Warranty	2 years (Optional: 3, 4, 5 years)

<b>Software</b>	
<b>Software - OS</b>	
Operating System	Windows 10 IoT x64
<b>Software - PIXERA</b>	
PIXERA Software License	PIXERA Server
Vioso Software License	Optional (Autocal, Autocal Plus)
Layers	Unlimited
Playout	Unlimited
Local Editing	Yes (GUI Output Option recommended)
3D Visualisation	Yes (GUI Output Option recommended)
Network Master / Manager	Yes
Rendering (Output, Visu)	Yes (GUI Output Option recommended)
PIXERA control CORE License	Yes

FHD	=	1920x1080, Uncompressed Datarate at 60fps	=	375MB/s
UHD	=	3840x2160, Uncompressed Datarate at 60fps	=	1,5GB/s
4K	=	4096x2160, Uncompressed Datarate at 60fps	=	1,6GB/s

- \* Power Consumption Average with High Load = Tested with very high CPU, GPU and SSD workload
- \* Heat Dissipation Average with High Load = Calculated with very high CPU, GPU and SSD workload
- \* Not all configs possible = Not all configurations of video input, network, audio cards are possible. Please ask.
- \* Max. Product Dimension = Product dimension incl. front handles, back handles, rubber bumpers, etc. Handles can not be removed on all products!
- \* Case Dimensions, Product Dimensions: Please note that due to the production process there may be deviations in the dimensions.
- \* Value higher with optional upgrades: depending on the selected options the value can be higher - please check manual for exact value.



# PIXERA MEDIA SERVER PERFORMANCE CHARTS

## PIXERA four

This overview shows the maximum number of content streams per codec, that can be played back at the same time.

FHD@60fps	Codec	Content Data Rate	Y68	
			2 SSD	4 SSD
	Videoformats	HAP	234 MB/s	51
HAPQ		472 MB/s	36	36
NotchLC		486 MB/s	31	31
H264		11.3 MB/s	26	26
H265		5.55 MB/s	19	19
Image Sequences	TIFF 8 Bit	1.45 GB/s	26	36
	PNG 8 Bit	576 MB/s	11	11
	DPX 10 Bit	1.95 GB/s	13	13
	DDS 8 Bit	243 MB/s	45	49

UHD@60fps	Codec	Content Data Rate	Y68	
			2 SSD	4 SSD
	Videoformats	HAP	234 MB/s	16
HAPQ		472 MB/s	7	7
NotchLC		486 MB/s	7	7
H264		11.3 MB/s	10	10
H265		5.55 MB/s	6	6
Image Sequences	TIFF 8 Bit	1.45 GB/s	6	7
	PNG 8 Bit	576 MB/s	3	3
	DPX 10 Bit	1.95 GB/s	5	6
	DDS 8 Bit	243 MB/s	26	32

All videos had a frame rate of 60 fps, four framelocked outputs with 3840x2160px @60Hz were used for this test.  
 One UHD GUI-Monitor was used. Pixera workspace rendering was set to thumbnail.  
 Please note that the kind of content used may influence the performance of individual video codecs. The test results are approximate values.  
 Performance results will differ when using VIOSO or FRAMEBLENDING.



# PIXERA MEDIA SERVER CAPTURE CARDS LATENCY

## Input

The following table provides an overview of the latency from capture to output.

Capture Cards	Input	Delay in Frames
PXO-IH2	2x HDMI 2.0	3 frames
PXO-CT1H1	1x 12G-SDI/4x 3G-SDI	2 frames
	1x HDMI 2.0	3 frames
PXO-IS2	2x 3G-SDI	2 frames
PXO-IS4	4x 3G-SDI	3 frames
PXO-CS4	4x 3G-SDI	3 frames
PXO-CS8	8x 3G-SDI	3 frames
PXO-CT4	4x 12G-SDI/8x 3G-SDI	3 frames
PXO-IS1	1x 3G SDI	2 frames

