



PIXERA four RS

Basic technical specifications



Product	PIXERA four RS
Available models	PIXERA four RS
Art. Nr.	PX4-RS
Physical	
Case Dimension (WxDxH)	445 x 482 x 176mm
Max. Product Dimension (WxDxH)*	484 x 550 x 176mm
Product Weight	18,5kg
Hardware	
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
Power	
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*)
Operating System Storage	
Operating System Amount of Physical NVMEs	1
Operating System Capacity (Net)	500GB
Operating System RAID Level	-

Data Storage NVMe SSD Onboard	
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)
Video Outputs	
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
GUI Outputs	
GUI Outputs	Optional
GUI Output Standard	Optional (4x mDP1.4)
Max GUI Output Resolution	Optional (4096x2160 @ 60Hz)
Connection	
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
Video Inputs (Not all configs possible*)	
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
Audio Outputs (Not all configs possible*)	
Analog Balanced	Stereo Output (2x quarter-inch TRS jack)
SPDIF	Optional
AES/EBU	Optional
Dante Soundcard	Optional
Dante virtual soundcard	Yes
Environmental Specifications - Operating	
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

Environmental Specifications -Storage	
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
General	
Warranty	2 years (Optional: 3, 4, 5 years)

Software	
Software - OS	
Operating System	Windows 10 IoT x64
Software - PIXERA	
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	477 Mbit/s	51
HAPQ		984 Mbit/s	36	36
NotchLC		1170 Mbit/s	31	31
H264		42.4 Mbit/s	26	26
H265		19 Mbit/s	19	19
Image Sequences	TIFF 8 Bit	2917 Mbit/s	26	36
	PNG 8 Bit	1392 Mbit/s	11	11
	DPX 10 Bit	3892 Mbit/s	13	13
	DDS 8 Bit	487 Mbit/s	45	49

UHD@60fps	Codec	Content Data Rate	Y68	
			2 SSD	4 SSD
	Videoformats	HAP	1871 Mbit/s	16
HAPQ		3775 Mbit/s	7	7
NotchLC		3980 Mbit/s	7	7
H264		90.4 Mbit/s	10	10
H265		44.4 Mbit/s	6	6
Image Sequences	TIFF 8 Bit	11664 Mbit/s	6	7
	PNG 8 Bit	4608 Mbit/s	3	3
	DPX 10 Bit	15556 Mbit/s	5	6
	DDS 8 Bit	1945 Mbit/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 disabled.
 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

