



PIXERA one Gen. 2

Basic technical specifications



Product	PIXERA one
Available models	Pixera one Gen.2 Dual Quad
Art. Nr.	Dual Quad PX1-2-G2 PX1-4-G2
Physical	
Case Dimension (WxDxH)	444 x 441 x 44,4mm
Max. Product Dimension*	484 x 489 x 44,4mm
Product Weight	8,3kg
Hardware	
Server Grade Hardware Components	Yes
CPU Type	Intel Xeon SP
CPU Performance Index	14 24
CPU # of Cores / # of Threads	8/8 12/24
CPU Min/Max Frequency	1,8/1,9GHz 2,0/3,9GHz
RAM	64GB 128GB
RAM Channels used	4 8
ECC RAM	Yes
Power	
Power Supply	100-240VAC, 50-60Hz
Power Consumption Peak	500W
Operating System Storage	
Operating System Amount of Physical SSDs	1
Operating System Capacity (Net)	500GB
Data Storage NVMe Onboard	
Data NVMe Capacity (Net)	1.92TB (Optional up to 15,36TB)
Data NVMe Max. Read Rate	5 GB/s
Uncompressed Content Playback	Yes

Video Outputs	
Licensed Video Outputs	PIXERA Director 2 4
Physical Video Outputs	4
Video Output Standard	DP1.4a
Video Output Resolution (max. per Output)	5120x2880 @60Hz
EDID Management	Yes
Genlock	Optional
Framelock	Optional
GUI Outputs	
GUI Outputs	Optional
GUI Output Standard	Optional (2x mDP1.4a)
Max GUI Output Resolution	Optional (4096x2160)
Connection	
USB	2x USB3 Front, 2x USB3 Rear, 2x USB2 Rear
Network	2x 10Gbps
IPMI	1x IPMI LAN
Video Inputs (Not all configs possible*)	
HDMI	Optional
3G-SDI	Optional
12G-SDI	Optional
Audio Outputs (Not all configs possible*)	
Analog Balanced	Stereo balanced (quarter-inch TRS jack)
SPDIF	Optional
AES/EBU	Optional
ADAT	Optional
MIDI	Optional
DANTE Virtual Soundcard	Optional
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 Warranty	Total 3 4 5 years

Software	
Software - OS	
Operating System	Windows 10 IoT x64
Software - PIXERA	
PIXERA Software License	Pixera Director PIXERA Server
Vioso Camera Calibration	Optional
Layers	Unlimited
Playout	Unlimited
Local Editing	Yes (GUI Card recommended)
3D Visualisation	Yes (GUI Card recommended)
Network Master / Manager	Yes
Rendering (Output, Visu)	Yes (GUI Card recommended)
PIXERA control	PIXERA control GATE

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

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

	Codec	Content Data Rate	X14	X24	
			1 SSD	1 SSD	
FHD@60fps	Videoformats	HAP	477 Mbit/s	18	45
		HAPQ	984 Mbit/s	11	30
		NotchLC	1170 Mbit/s	16	20
		H264	42.4 Mbit/s	4	15
		H265	19 Mbit/s	4	13
	Image Sequences	TIFF 8 Bit	2917 Mbit/s	11	13
		PNG 8 Bit	1392 Mbit/s	1	4
		DPX 10 Bit	3892 Mbit/s	9	10
		DDS 8 Bit	487 Mbit/s	19	30

	Codec	Content Data Rate	X14	X24	
			1 SSD	1 SSD	
UHD@60fps	Videoformats	HAP	1871 Mbit/s	12	16
		HAPQ	3775 Mbit/s	6	7
		NotchLC	3980 Mbit/s	6	7
		H264	90.4 Mbit/s	2	6
		H265	44.4 Mbit/s	1	3
	Image Sequences	TIFF 8 Bit	11664 Mbit/s	3	3
		PNG 8 Bit	4608 Mbit/s	0	1
		DPX 10 Bit	15556 Mbit/s	2	2
		DDS 8 Bit	1945 Mbit/s	15	20

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

