Plataforma de processamento de vídeo ao vivo centrada em TI/IP

AT-KC2000/2000S1

A plataforma IT/IP "KAIROS" alcança maior desempenho utilizando totalmente o poder e a flexibilidade de sua CPU e GPU, equilibrando a carga total de processamento sem as restrições de configuração dos sistemas tradicionais baseados em hardware. KAIROS oferece flexibilidade irrestrita de entrada, saída e operação para produção eficiente de vídeos expressivos ao vivo

Key Features

Uma variedade de entradas e saídas disponíveis para uso

Resolução e formato independente

Estrutura em camadas para expressão de vídeo versátil

Flexibilidade e escalabilidade

Redundância de rede ST 2022-7

AT-KC2000/2000S1

General	
Weight	Approx. 17 kg without accessories & options
Dimensions (W x H x D)	430 mm x 176 mm x 505 mm (4RU)
Operating Temperature	5 to 35 degree Celsius
Operating Humidity	10% to 90% (no condensation)
Power Requirement	AC100-127V/200-240V, 50/60Hz, 10A/5A, Redundant
Signal Processing	Y/Pb/Pr: 4:2:2 10 bit
HD	1080/59.94i, 50i, 720/60p, 59.94p, 50p
4K	2160/60p, 59.94p, 50p, 30p, 29.97p, 25p, 24p, 23.98p
Video/Audio/Synchronous	
Support Video Format	
FHD	1080/60p, 59.94p, 50p, 30p, 29.97p, 25p, 24p, 23.98p
Audio Format	
ST 2110-30 (AES67)	48 KHz/24 bit
Syncronous	
PTP Sync	Support for QSFP and GbE port
FS (Frame Synchronize)	For each CH, always ON (can't turn off)
Frame Delay	0 frame to 12 frame, 1 frame step
LAN	RJ-45 x 2, 1GbE (Control system, PTP sync, NDI®*1, RTP/SRT/RTMP/RTSP)
HDMI	Use of recommended products / Yes, Please refer to "Third party product" page
	https://pro-av.panasonic.net/en/support/kairos_partners.html
I/O Specification	
IP	
QSFP	QSFP28 x 2, 100GbE (ST 2110, PTP sync)
Baseband	
DisplayPort	DisplayPort 1.4 x 4, for Multiview output
	Micro BNC x Max. 48 *2*3
Agile Input Routing Support	✔
ST 2110	1.5G (1080i, 720p): 64 in / 40 out*2
	3G (1080p): 32 in / 40 out *2
	4K: 8 in / 10 out *2
ST 2022-7 Redundancy	✔ No halving of input*2, halving of output
	1.5G (1080i, 720p): Max. 32 in / 16 out *2*3
	3G (1080p): Max. 32 in / 16 out *2*3
	4K: Max. 16 in / 8 out *2*3
	16 in / 4 out (only input for RTSP)
Function	
Control Panel	AT-KC10C1/KC10C2, up to 8 units each, up to 16 units in total can be connected
Key	No restriction, depend on GPU performance
RAM Player	8 CH, 96 GB, Uncompressed, HD/4K
	* Max. RAM capacity is reduced with SDI I/O boards installed. For details, please check SDI I/O board web page.
Clip Player	2 CH, 850 GB (Share capacity with audio player), compressed, AVC-Intra/H.264/DNxHD/ProRes
Still Store	32 GB storage, up to 4K resolution
	No restriction, depend on GPU performance
Audio Player	4CH, 850 GB (Share capacity with clip player), compressed, WAV/MP3/Ogg/FLAC/AIFF
	ST 2110-10, ST 2110-20, ST 2110-30
	8 CH IN, RTP/SRT/RTMP/RTSP switchable, H.264 HD, Audio: 16 CH each for SRT, 8 CH each for RTMP/RTSP
	* 720p video signal from Panasonic PTZ cameras is not supported. For RTSP, only input is supported. Note that RTSP input does not work with the AW-HE130W/K (Discontinued model) and AW-HR140 (Limited stock) PTZ cameras.
	2 CH OUT, RTP/SRT/RTMP switchable, H.264 HD, Audio: 16 CH each for SRT, 8 CH each for RTMP/RTSP
	Yes

	Yes
Output Format	HD/4K
Display	4 ch, Max. 36 PiP
Multiviewer	
	Up to 12K (66M pixels) resolution
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
Cropping	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
Tally	
User Management	
	Yes (with AT-SF005 Audio Mixer option)
	Yes*2
	Yes
	Yes, TSL5.0 (incl. AK-UC4000), Panasonic AW-PTZ
	Yes, Please refer to "Third party product" page
	https://pro-av.panasonic.net/en/support/kairos_partners.html#thirdparty
Option	4K (equipped as standard)
	I/O (equipped as standard)
	CANVAS (equipped as standard)
	RossTalk (option), RossTalk, Ross and XPression, are trademarks or registered trademarks of Ross Video Limited.
	NMOS (option), NMOS (Networked Media Open Specifications) is a protocol standardized by AMWA (Advanced Media Workflow Association) for controlling and managing devices via IP networks.
	Audio Mixer (option)
	Touch Control Panel Software (option)* Supported by KAIROS software version 1.5 or lator.
Accessories	
AC Cable	2
	1 set with screws
	Yes, Protocol, The command table is available from the PASS KAIROS Website.
	Yes, (With AT-SFE01 RossTalk option)
	Yes, Please refer to "Third party product" page
	Yes, IS-04, IS-05, (With AT-SFE03 NMOS option)
	Yes, Please refer to "Third party product" page
	ST 2110-10, ST 2110-20, ST 2110-30
	Yes, T2 server easy control (AMP)
	Yes, Hyper Deck Studio easy control
Note	*1:NDI® is a new protocol developed by NewTek, Inc. that supports IP video production workflow. NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries. In this instance, NDI® is used to indicate low latency with NDI® High Bandwidth.
	*2:KAIROS software version 1.6 or lator.
	*3:The optional AT-KC20M1 SDI I/O boards are required. The numbers of input/output shown here are the maximum numbers that can be loaded.
	Yes, supports AUX bus control and macro control
	Yes *
	*KAIROS software version 1.7 or lator.
	2 in / 2 out, 16 CH audio for each
	2 CH IN and 2 CH OUT, Audio: 16 CH each, NDI®*1 High Bandwidth, up to FHD resolution
	* 2CH IN and 2CH OUT are available separately from RTP/SRT/RTMP/RTSP streaming.
	Yes