



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

## **AT-KC200**

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





Accessories AC Cable





## AT-KC200

https://ep-com-p-connectlatam.wd.pisceu.panasonic.eu/br/pt/ products/broadcast-proav/kc200

Power Requirement	AC100-127V/200-240V, 50/60Hz, 10A/5A, Redundant
Operating Temperature	5 to 35 degree Celsius
Operating Humidity	10% to 90% (no condensation)
Weight	Approx. 17 kg without accessories & options
Dimensions (W x H x D)	430 mm x 176 mm x 505 mm (4RU)
Video/Audio/Synchronous	
Support Video Format	
4K	2160/60p, 59.94p, 50p, 30p, 29.97p, 25p, 24p, 23.98p
FHD	1080/60p, 59.94p, 50p, 30p, 29.97p, 25p, 24p, 23.98p
HD	1080/59.94i, 50i, 720/60p, 59.94p, 50p
Signal Processing	Y/Pb/Pr: 4:2:2 10 bit
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
I/O Specification	
IP	
QSFP	QSFP28 x 2, 100GbE (ST 2110, PTP sync)
LAN	RJ-45 x 2, 1GbE (Control system, PTP sync, NDI®*1, RTP/SRT/RTMP/RTSP)
Baseband	
DisplayPort	DisplayPort 1.4 x 4, for Multiview output
HDMI	Use of recommended products / Yes, Please refer to "Third party product" page
	https://pro-av.panasonic.net/en/support/kairos_partners.html
Agile Input Routing Support	<b>✓</b>
ST 2110	1.5G (1080i, 720p): 64 in / 40 out*2
	4K: 8 in / 10 out *2
ST 2022-7 Redundancy	✓ No halving of input*2 halving of output
Function	
Key	No restriction, depend on GPU performance
Control Panel	AT-KC10C1/KC10C2, up to 8 units each, up to 16 units in total can be connected
Still Store	7 GB storage, up to 4K resolution
	7 GB storage, up to 4K resolution 8 CH, 32 GB, Uncompressed, HD/4K  * Max. RAM capacity is reduced with SDI I/O boards installed. For details, please check SDI
RAM Player	7 GB storage, up to 4K resolution 8 CH, 32 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.
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RAM Player Clip Player	7 GB storage, up to 4K resolution 8 CH, 32 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. 2 CH, 400 GB (Share capacity with audio player), compressed, AVC-
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RAM Player Clip Player Audio Player Multiviewer Output Format Display	7 GB storage, up to 4K resolution 8 CH, 32 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. 2 CH, 400 GB (Share capacity with audio player), compressed, AVC-Intra/H.264/DNxHD/ProRes 4CH, 400 GB (Share capacity with clip player), compressed, WAV/MP3/Ogg/FLAC/AIFF
RAM Player  Clip Player  Audio Player  Multiviewer  Output Format  Display  Cropping	7 GB storage, up to 4K resolution 8 CH, 32 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. 2 CH, 400 GB (Share capacity with audio player), compressed, AVC-Intra/H.264/DNxHD/ProRes 4CH, 400 GB (Share capacity with clip player), compressed, WAV/MP3/Ogg/FLAC/AIFF  HD/4K 4 ch, Max. 36 PiP
RAM Player  Clip Player  Audio Player  Multiviewer  Output Format  Display  Cropping  User Management	7 GB storage, up to 4K resolution 8 CH, 32 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. 2 CH, 400 GB (Share capacity with audio player), compressed, AVC-Intra/H.264/DNxHD/ProRes 4CH, 400 GB (Share capacity with clip player), compressed, WAV/MP3/Ogg/FLAC/AIFF  HD/4K 4 ch, Max. 36 PiP
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RAM Player  Clip Player  Audio Player  Multiviewer  Output Format  Display  Cropping  User Management  Tally	7 GB storage, up to 4K resolution 8 CH, 32 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. 2 CH, 400 GB (Share capacity with audio player), compressed, AVC-Intra/H.264/DNxHD/ProRes 4CH, 400 GB (Share capacity with clip player), compressed, WAV/MP3/Ogg/FLAC/AIFF  HD/4K 4 ch, Max. 36 PiP Yes  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.

Note	*1:NDI® is a new protocol developed by NewTek, Inc. that supports IP video productior 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.
	Micro BNC x Max. 48 *2*3
	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
	8 in / 2 out (only input for RTSP)  No restriction, depend on GPU performance
	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 eac 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 Up to 8K (32M pixels) resolution
	Yes
	Yes
	Yes
	Yes Yes
	Yes
	Yes
	Yes
	Yes
	Yes Yes
	Yes
	Yes
	Yes
	Yes
	Yes Yes
	Yes
	Yes 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 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
	Yes, supports AUX bus control and macro control Yes *
	*KAIROS software version 1.7 or lator.  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
	2 in / 2 out, 16 CH audio for each