

Kairos Core (Main Frame)

[See the page for KAIROS Version Up history.](#)

| | Kairos Core 1000 (AT-KC1000) | Kairos Core 100 (AT-KC100) |
|--------------------------------|---|--|
| General | | |
| Power Requirement | AC 100 V - 127 V/200 V - 240 V, 50 Hz/60 Hz, 12 A/9 A (Redundant) | AC 100 V - 240 V, 50 Hz/60 Hz, 8 A - 4 A (Redundant) |
| Operating Temperature | 5 to 35 degree Celsius | |
| Operating Humidity | 10% to 90% (no condensation) | |
| Weight | Approx. 17.4 kg / 38.36 lb (body only) | Approx. 10.6 kg / 23.36 lb (body only) |
| Dimensions (W x H x D) | 438 mm x 88 mm x 620 mm / 17.2 in. x 3.5 in. x 24.4 in. (Excluding protrusion) | 438 mm x 43.5 mm x 621 mm / 17.2 in. x 1.7 in. x 24.4 in. (Excluding protrusion) |
| Video/Audio/Synchronous | | |
| Support Video Format | | |
| 4K | 2160/60p, 59.94p, 50p, 30p, 29.97p, 25p, 24p, 23.98p (Kairos Core 100 requires AT-SF001 4K option) | |
| FHD | 1080/60p, 59.94p, 50p, 30p, 29.97p, 25p, 24p, 23.98p 1080/59.94i, 50i | |
| HD | 720/60p, 59.94p, 50p | |
| Signal Processing | Y/Pb/Pr: 4:2:2 10 bit | |
| Audio Format | | |
| ST2110-30 (AES67) | 48 KHz/24 bit | |
| Synchronous | | |
| 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 (ST2110, PTP sync) | |
| LAN | RJ-45 x 2, 1GbE (Control system, PTP sync, NDI, RTP/SRT/RTMP/RTSP) | |
| Baseband | | |
| DisplayPort | DisplayPort 1.4 x 2, for Multiview output | |
| Gateway Port | Custom Interface Connectors x 8, for Deltacast FLEX modules | |
| SDI | 12G-SDI, 3G-SDI x 3, Use of recommended products* | |
| | 3G-SDI x 4, Use of recommended products* | |
| HDMI | HDMI 2.0 x 1, Use of recommended products* | |
| DisplayPort | DisplayPort 1.2 x 1, Use of recommended products* | |
| Input CH (Number of channels that can be used simultaneously) | | |
| 4K | 8 CH | 6 CH (with AT-SF001 4K option) 8 CH (with AT-SF001 4K option and AT-SF002 I/O option) |
| HD | 32 CH | 24 CH 32 CH (with AT-SF002 I/O option) |
| Output CH (Number of channels that can be used simultaneously) | | |
| 4K | 5 CH | 3 CH (with AT-SF001 option 4K option) 4 CH (with AT-SF001 option 4K option and AT-SF002 I/O option) |
| HD | 20 CH | 12 CH 16 CH (with AT-SF002 I/O option) |
| Function | | |
| Layer (ME) | No restriction, depend on GPU performance | |
| Key | No restriction, depend on GPU performance | |
| Still Store | 12 GB storage, up to 4K resolution | 750MB storage, up to FHD resolution (with AT-SF001 4K option for 4K resolution) |
| Control Panel | AT-KC10C1, up to 8 units can be connected | |
| RAM Player | 8 CH, 64 GB, Uncompressed, HD/4K | 8 CH, 24 GB, Uncompressed, HD/4K (with AT-SF001 4K option for 4K resolution) |
| Clip Player | 2 CH, 180 GB, compressed, AVC-Intra, H.264, DNxHD/ProRes | 2 CH, 70 GB, compressed, AVC-Intra, H.264, DNxHD/ProRes (with AT-SF001 4K option for 4K resolution) |
| ST 2110 Support | ST 2110-10, ST 2110-20, | |

| | | |
|-------------------------------|---|--|
| | ST 2110-30 | |
| NDI® Support (Video only) | 2 CH IN and 2 CH OUT, Video only, High bandwidth NDI®, up to FHD resolution <i>* 2CH IN and 2CH OUT are available separately from RTP/SRT/RTMP/RTSP streaming.</i> | |
| Stream Support (Video only) | 8 CH IN, RTP/SRT/RTMP/RTSP switchable, H.264 HD, video only <i>* 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 and AW-HR140 PTZ cameras.</i> | 6 CH IN, RTP/SRT/RTMP/RTSP switchable H.264 HD, video only |
| | 2 CH IN, RTP/SRT/RTMP switchable, H.264 HD, Video only | |
| Panasonic PTZ Control Support | Yes | |
| I/O Scalar | Yes | For HD/4K down/up conversion, AT-SF001 4K option is required |
| Canvas Output | Up to 8K (32M pixels) resolution | up to 8K (32M pixels) resolution (with AT-SF003 CANVAS option, AT-SF001 4K option is required for outputting 4K resolution or higher.) <i>* Depending on the performance of the GPU, some functions may not operate at 8K resolution.</i> |
| Multiviewer | | |
| Output Format | HD/4K | |
| Display | 2 ch, Max. 36 PiP | |
| Layout Preset Store/Recall | Yes | |
| GPU Meter | Yes | |
| Clocks | Yes | |
| Countdowns | Yes | |
| Images | Yes | |
| Tally Indicators | Yes | |
| Audio Level Meter | Yes | |
| MV over IP | Yes | |
| Effects | | |
| Luminance Key | Yes | |
| Chroma Key | Yes | |
| DVE(2D) Effects | Yes | |
| Border with Softness | Yes | |
| Corner Pinning | Yes | |
| Color Corrections | Yes | |
| Cropping | Yes | |

| Transition | |
|--|---|
| Multimix | Yes |
| Offset Transitions | Yes |
| Transition Effects | Yes |
| Macros | |
| Scene Specific Macros | Yes |
| LUA Scripting Support | Yes |
| Color Mats | |
| Bi-Color Wash Mattes | Yes |
| Test Patterns | Yes |
| Title Generator | |
| Title Generator | Yes |
| Audio Mixer | |
| Audio Mixer | Yes (With AT-SF005 Audio mixer option) |
| Tally | |
| 6 Independent Tally Systems | Yes |
| Tally by IP Protocol | Yes, TSL5.0 (incl. AK-UC4000), Panasonic AW-PTZ |
| External GPIO Box Support | Yes, Please refer to " Third party product " page |
| Accessories | |
| AC Cable | 2 |
| Rack-mounted Slide Rail | 1 set with screws |
| Supports Third Parties / Standards / Protocols | |
| NMOS Support | Yes, IS-04, IS-05, (With AT-SFE03 NMOS option) |
| ST API | Yes, Protocol, The command table is available from the PASS KAIROS Website. |
| Grass Valley Server Control | Yes, T2 server easy control (AMP) |
| Blackmagic Recorder Control | Yes, Hyper Deck Studio easy control |
| LAWO vsmSNAP Panel Compatible | Yes, supports AUX bus control and macro control |

* Recommended product: Deltacast FLEX module.

AT-KC10C1 Kairos Control (Control Panel)

| Item | Specification | Note |
|---------|---------------|------|
| General | | |

| | | |
|--------------------------|---|--------------------------|
| Power Requirement | DC 12V, 8.0A | XLR 4pin x 2 (Redundant) |
| Operating Temperature | 0 to 40 degree Celsius | |
| Operating Humidity | 10% to 90% (no condensation) | |
| Weight | Approx. 15.4 kg / 33.95 lb | |
| Dimensions (W x H x D) | 1140 mm x 94 mm x 420 mm 44.9 in. x 3.7 in. x 16.5 in. | Excluding protrusion |
| Control Terminals | | |
| LAN (Rear Panel) | RJ-45 x 1, 1GbE | |
| USB (Control Panel) | USB2.0 typeA x 1 | |
| USB (Rear Panel) | USB2.0 typeA x 1 | |

* NDI® is registered trademarks of NewTek in the United States.