

Cradle Series RF02 Tech Specs

Main Controller Module		Overall Chassis	
Processor	8-core ARM64 high-performance processor (Cortex) A73@1.8GHz	Overall Chassis	18x (MAX) / Rear plug-in card structure (Guide rail, 20 Pin gold finger connector)
Memory	12GB DDR4	Max Power per slot	25W/ slot
Storage	16GB EMMC	Service Support	Supports encoding/decoding/ I/O integrated/media gateway cards
Operating System /Software	Linux 5.10/KiloLink Server RF version	Dimension	Size: 483mm × 487mm × 88mm (standard 2RU)
Management and Control	Web/ HTTP API	Working temperature	-10°C to 50°C
Network Switch Module		Storage temperature	-20°C to 70°C
Service Cards Connection	18 × 10Gbps/2.5Gbps Adaptive Ethernet (Copper)*Note: Slot1/2 can support up to 10Gbps, others support 1Gbps/2.5Gbps	Relative humidity	5% to 90%
Control Module Connection	2 × 5Gbps (Copper)	Heat dissipation	Self-Adjust heat dissipation / Auto-temp control
External Connection	3 × 10Gbps SFP + Optical Ports (IEEE 802.3ae) 1 × 10Gbps RJ45 Ethernet port	Power supply	2 × AC100-240V/7A (Max), 60/50Hz, 500W Max(Optional)
Type	Three-layer management switch/VLAN support (802.1Q/QinQ)	Power consumption	No load : 30W Full Load: 480W
Switching Capacity	240Gbps	Compatible Service Cards	18 × (Max) Encoding, 18 × (Max) Decoding 18 × (Max) NDI I/O Conversion 18 × (Max) 4K Media Conversion Gateway 18 × (Max) 4K Wireless Decoding Gateway (HDMI/SDI Baseband Output) Above can be freely combined
Management and Control	Web (KiloLink Server Pro RF management based on the main controller)		

Display/Interact/Indicate

Display	3-inch LCD color display (non-touch)
Buttons	4 × (Power/Flip left/Flip right/Select)
Indicator light	Status indicator/ Alarm indicator/ Power indicator
Buzzer	Press/Alarm



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Reminder: All photos are for reference only, specifications are subject to the physical product.

Please scan with browser.



CRADLE SERIES RF02

UNIFY YOUR WORKFLOW, AMPLIFY YOUR POTENTIAL

Integrated Network Switch

Centralized Management with KiloLink Server Pro

High Density Modular Design

18 Multi-Conversion Cards Supported



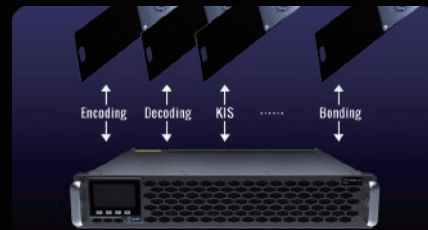
The Cradle Series RF02, the pinnacle of Kiloview's Cradle Series, is your ultimate unified media center. This advanced rack framework is designed to transform your AV-over-IP workflows by combining unparalleled flexibility, power, and space efficiency within a 2RU structure. Tailored for high-density multi-service environments, the RF-02 delivers a seamless integration experience that enhances your media operations with robust performance, centralized management, and comprehensive modularity.

Integrated Network Switch

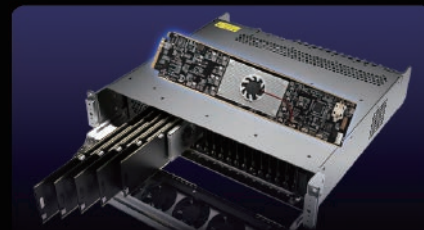
Save Big – Cut the Cost of a Switch!



Effortless Transmission: 3 x 10Gbps SFP+ fiber Ethernet interfaces and 10Gbps RJ45 Ethernet, ensuring effortless handling of high-bandwidth NDI streams.



Unified Integration: 1G/2.5G network switch module connects all internal service cards, including encoding, decoding, NDI conversion, media gateway, bonding and KIS.



Efficient Data Flow: RF02 streamlines the data flow within the platform, eliminating the need for external network switches. It saves setup complexity and costs.

Centralized Management with KiloLink Server Pro



Powerful Controller: Built-in ARM64 main controller running KiloLink Server Pro, enabling centralized management and upgrades of all service cards. It allows management of all cards.

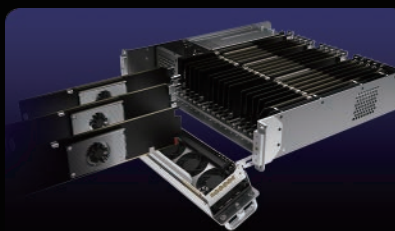


On-Premise Bonding Service: It is Your receiving server for Kiloview P series 4G/5G encoders. Paired with a decoding card, it allows seamless reception of remote video streams to SDI/HDMI.

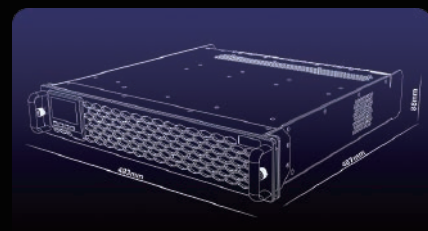


Streamlined Operations: The platform's capability to auto-discover, monitor, and configure all the media service cards, enable smooth, uninterrupted media operations.

High Density Modular Design



18 Service Cards: flexible and independent configurations enable high-density encoding, decoding, or media gateway setups. Its mix-and-match solution suits any media workflow.



Space Saving Design: The compact 2RU design saves space while supporting high-density functionality, reducing the physical footprint and simplifying operational complexity.



Seamless Workflows: The internal architecture ensures point-to-point media processing tasks, reducing the need for external devices and improving workflow efficiency.

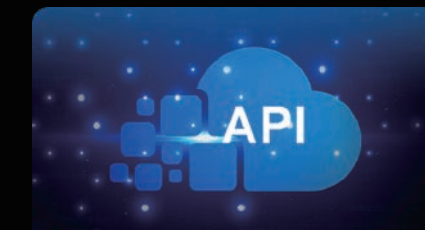
Your Ultimate Media Center



Reliable Performance: Dual-redundant power supplies and advanced cooling systems ensure consistent performance even under demanding conditions.



User-Friendly Interface: A 3.0-inch LCD panel with intuitive buttons for quick status monitoring and configuration, coupled with a web-based interface for remote management.



Professional Integration Capabilities: Extensive API support allows for deeper integration, automation, and customization, making the system adaptable to specific operational needs.



Broadcast and Television



Reality Show

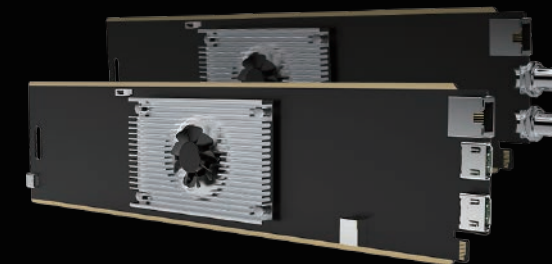


Sports Events



House of Worship

Optional Service Cards



More modules are coming soon. Stay tuned!

Encoding & Decoding

Our integrated service cards (FN-60/ FN-50) support H.264/ H.265/ NDI SpeedHQ CODEC, delivering UHD 4Kp60 with YCbCr 4:2:2/ 10-bit color format

Media Gateway Service Card



Versatile Video & Media Protocol Conversion: Each card supports up to 1 x 4Kp60 or 4 x 1080P60 video format conversions and media protocol transformations



Comprehensive Format Interchange: Seamlessly convert between H.264/ H.265/ NDI SpeedHQ video formats and Dante/ NDI/ AAC/ MP3/ PCM audio formats



Exclusive NDI Feature Support: NDI Bridge Utility is embedded in the SDK, enabling hardware-based Bridge functionality. Also, it supports protocol conversion between NDI High Bandwidth and NDI HX/NDI HX3



Wide Protocol Support: Effortlessly interchange between NDI/ Dante AV-H/ SRT/ RTMP/ HLS/ TS/ RTSP protocols, with support for over 50 concurrent connections



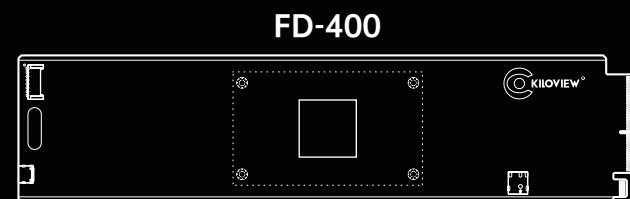
NDI Multiview Business Card (FMV-400)

Our Supports up to 16-channel NDI HX, NDI HX3, NDI High Bandwidth video preview, and is compatible with NDI 6 HDR. Equipped with two HDMI 2.0b 4K output interfaces for Multiview.

Multi-Service Decoding and Multiview Business Card (FD-400)

A new upgrade based on Kiloview's powerful D350/RD350, supporting multi-protocol (SRT/RTMP/HLS/TS/RTP/RTSP) H.264 and H.265 decoding for up to 12x 1080p60 or 4x 4Kp60 streams. It also supports NDI HX, NDI HX3, and NDI High Bandwidth. Depending on the actual resolution, it supports simultaneous decoding and customizable Multiview display for up to 16 video channels. Features 2x HDMI 2.0b and 1x 3G-SDI output.

** More modules are coming soon. Stay tuned!*



Diversified Business Solutions for Unmatched Media Workflow Efficiency



Multi-Channel Video Encoder

Inserting max 18pcs of FN-60 (HDMI 2.0) or FN-50 (12G-SDI) cards into the RF02 chassis to create a powerful 18-channel 4K Full UHD super video encoder. It supports H.264/H.265 and NDI SpeedHQ encoding, both NDI HX/HX3 and NDI High Bandwidth, with NDI 6 and HDR compatibility. Additionally, it supports multiple streaming protocols like SRT, RTMP, HLS, TS, RTP, and RTSP etc.



Multi-Channel Video Decoder

Without replacing the encoding service cards (FN-50/FN-60), the RF02 can be a high-performance 18-channel 4K decoder, supporting NDI HX/HX3/High Bandwidth and various streaming protocols. Output via HDMI 2.0 or 12G-SDI, while maintaining NDI 6 and HDR support.



NDI Multiview and Video Switcher

The upcoming FMV-400 and FD-400 Multiview cards, combined with FN-60 or FN-50 decoding cards, will transform your system into a tier-1 video switcher with multiview preview with up to 4K Full UHD resolution and HDR support, you can preview all the NDI video across multiple screens and output your selected feed and output to one or multiple FN-50/FN-60 to SDI or HDMI. The output can be connected to traditional video production systems like the BlackMagic ATEM. This creates a powerful, cost-effective, and fully-featured NDI video production platform.



Hybrid Encoding/Decoding

Combine the capabilities of encoding and decoding within the same system—no need to change cards (FN-50/FN-60), it can be a fully customizable 4K HDR hybrid workflow, giving you complete flexibility.



Kiloview P Series Decoding Gateway

Thanks to the built-in Kiloview KiloLink Server in the RF02, it can seamlessly connect Kiloview P3/P3 Mini devices without extra investment. Paired with FN-60 or FN-50 cards, it can be turned to be a wireless bonding receiver with up to 18 channels of video output to HDMI or SDI, all timecode-synchronized.



Powerful Media Format Conversion Hub

Using the FMG-400 media gateway card, your RF02 can be turned to be a robust platform supporting up to 18x 4Kp60 or 72x 1080p60 video format and protocols conversion. It enables H.264/H.265 conversions, NDI High Bandwidth to NDI HX, NDI HX to NDI High Bandwidth, up/downscaling, and cross-protocol conversions between NDI, SRT, RTMP, HLS, TS, RTP, RTSP, as well as Dante Audio/AV-H compatibility.



Hardware NDI Bridge

With the FMG-400, RF02 can provide you the experience of a hardware-based NDI Bridge with integrated format conversion. It can seamlessly connect with NDI Bridge Host, and when using two RF02 units, it can achieve the Bi-directional hardware NDI bridging. Also it offers up to 18x 4K or 72x 1080p NDI High Bandwidth compression to NDI HX or other formats, which is far better performed if comparing with the traditional PC-based NDI Bridge solutions, providing unmatched stability, simplicity, and cost-efficiency.