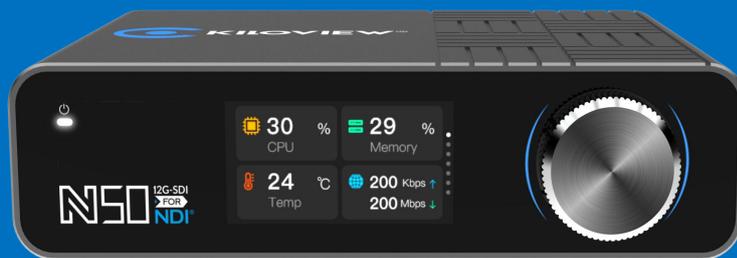


N50 12G-SDI/USB

NDI Converter

NDI & NDI|HX, Encoding and Decoding



Descriptions

Kiloview N50 is a full-functional NDI converter that uses the leading FPGA technologies, advanced-level AVC/HEVC algorithm, and NDI algorithm. It supports encoding/decoding within one unit which meets all your demands regarding IP-based video transmission.

N50 supports 12G-SDI format encoding/decoding of both NDI High-bandwidth and NDI|HX2/3 by H.264/H.265.

Features

- Built-in LCD panel + scroll-wheel
- USB 3.0 for Web Cam input
- Cold-shoe and V-mount
- Ultra Low latency transmission
- Local storage with TF card
- PTZ control via USB

Advantages

NDI and NDI|HX, Encoding + Decoding, All-in-One

- Plug-and-play operation, simple Web UI management
- 12G SDI input and encode to both NDI and NDI|HX2 & NDI|HX3
- NDI or NDI|HX2 or NDI|HX3 decoding to 12G SDI output
- Support video input from Web Cam via USB 3.0 expansion, or connection to PC via USB as input

Lower Latency, Better Image Quality

- End to end latency less than 80ms for full NDI
- Support YCbCr 4:2:2 10bit for encoding and decoding, enjoy professional image quality

Note: **N50 can be used as either an encoder or a decoder but not simultaneously currently. Please note our update when simultaneous working is available.**

Built-in LCD panel + Scroll-wheel

- A built-in LCD panel plus a scroll-wheel for management and easy configuration
- Working as a big tally

Audio and intercom

- Support 3.5mm analog audio line in/out
- Support voice intercom between all Kiloview devices and the control PC/phone, or with Kiloview Intercom Server

PTZ control

- Support PTZ control by external USB
- USB keyboard for switching optional or control a PTZ camera
- And PTZ control over IP with different protocols, no extra cable required

Other features

- TF card storage available, enabling cache for Kiloview Smart Recording for reliable recording
- Support cold-shoe mounting and V-mounting (paid accessories)

Compatible software



NDI-enabled devices and software

Parameters

Model	N50
Connectors and Basic Function	
Video input	1*4Kp60 12G-SDI 2.0
Video output	1*4Kp60 12G-SDI 2.0 (Loop or decoding output)
Audio port	1*3.5mm Line in 1*3.5mm Line out
Network	2*RJ45 1000Mbps Ethernet port Ethernet 1 with PoE (IEEE 802.3AT, 24W Max)
Video resolution	Input: up to 3840x2160@60fps (4Kp60), lowest 720p50 Output (decoding or loop out): up to 3840x2160@60fps (4Kp60), lowest 720p50
NDI® codec capacity	1x NDI® FB/HX encoding or 1x NDI® FB/HX decoding
NDI®CODEC feature	SpeedHQ (NDI CODEC): SHQ0, SHQ2 ISO MPEG-4 Part 10: Advanced Video Coding (AVC)/ITU H.264 ISO MPEG-H Part 2: High Efficiency Video Coding (HEVC)/ITU H.265 AVC (H.264): Baseline, Main, High, High10, High 4:2:2 up to 5.2 level HEVC (H.265): Main, Main Intra, Main10, Main10 Intra, Main 4:2:2 10, Main 4:2:2 10 Intra up to 5.1 High Tier
Audio encoding and decoding	NDI Audio; AAC-LC, Opus, G.711 a-Law/u-Law; others software expansion
USB	1*USB3.0 (type A) 1*USB3.0 (type C)
Human-computer interaction	1.96" LCD screen, Kiloview Magic Rotor

TF storage	Support TF card for recording, capacity up to 2TB
Tally	Built-in OLED panel available as front/rear Tally
Power	DC 12V (5.5/2.5) or PoE
Performance	
NDI	Support both NDI and NDI HX 2.0 (Note: It will support NDI HX 3.0 in the near future)
Typical Bitrates	<p>SpeedHQ (NDI CODEC): 4Kp60: 250Mbps, 1080p60: 132Mbps, 1080p30/1080i60: 112Mbps, 720p60: 105Mbps 480i60: 62.5Mbps</p> <p>AVC (H.264): Adjustable from 1Mbps to 120Mbps. >24Mbps (4Kp60); >10Mbps(1080p60).</p> <p>HEVC (H.265): Adjustable from 1Mbps to 120Mbps. >15Mbps (4Kp60); >6Mbps(1080p60).</p>
Recording	TF card available for local storage to .mov files. Support remote recording with Kiloview Recorder System, ensuring reliable recording together with Kiloview Smart Recording technology (TF card required).
Voice intercom	Support voice intercom by USB headset between devices directly, or with Kiloview Intercom server.
PTZ	Support PTZ control through USB to serial RS232/485/422; or PTZ control over IP with different protocols, no extra cable required
Input with Web Cam via USB	Support video input from Web Cam via USB 3.0 (Note: license required)
Connection with PC via USB	Support connection with PC via USB Type-C, as a video capture device (Note: license required)
Management	Web UI and remote management with Kiloview KiloLink Server
Firmware update	Firmware upload by Web UI and remote upgrade with Kiloview KiloLink Server
Mounting	Support cold-shoe mounting and V-mounting
Power Consumption	16W Max
Certificates	CE/ FCC/ROHS
Dimension	135*123.6*35mm