



Vistrol IMX4 NEOS Series

Modular Matrix With Videowall Function

The Vistrol IMX4 Neos Series is a high-performance, hardware-based 4K@60Hz seamless matrix switcher that integrates matrix switching and advanced videowall processing into a single modular chassis.

Designed with a flexible, modular architecture, the IMX4 Neos Series supports configurable input/output cards with audio and video routing scalability of up to 144 × 144, enabling tailored system configurations to meet diverse project requirements.

The system allows users to route any input source to any display or audio endpoint through multiple intuitive control methods, including:

- Back lit front panel buttons
- IR remote control
- RS-232 and LAN
- Web-based GUI

In addition to matrix switching, The IMX4 Neos Series offers powerful videowall capabilities, allowing users to

- Stretch a single input source seamlessly across multiple displays
- Display up to four independent input source on a single screen

With its low-latency performance, seamless switching, and robust control options, the IMX4 Neos Series is an ideal solution for conference rooms, control rooms, command centres, broadcast facilities, event halls, and any environment that demands high-speed, reliable A/V signal routing and videowall processing.

Application

- Command & Control Centres
- Control Rooms, NOCs & SOCs
- Conference & Board Rooms
- Broadcast & Media Facilities
- Event Halls & Live Production
- Large-Scale Videowall Deployments

Features

- Modular design with HDMI, DVI, VGA, YPbPr, 3G/HD/SD-SDI, HDBaseT I/O options.
- 4K60Hz input and output with HDMI 18Gbps, HDMI 2.0b and HDCP 2.2 compliant.
- Seamless switching between all the signals without black screen.
- Simple video wall display
- Quad-view display
- User-defined output resolution setting
- OSD (for 2K series cards)
- Audio embedding and de-embedding
- 32 kinds of scene presets

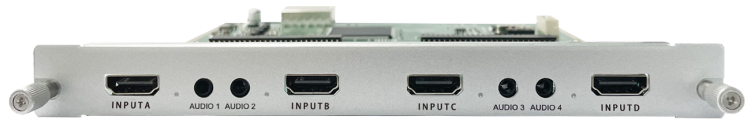
Technical Specification

MODEL	iMX4-NE-0808	iMX4-NE-1616	iMX4-NE-3232	iMX4-NE-4040	iMX4-NE-7272	iMX4-NE-144144
I/O Interface Numbers	8 Input 8 Output	16 Input 16 Output	32 Input 32 Output	40 Input 40 Output	72 Input 72 Output	144 Input 144 Output
Input Video Format	HDMI, DVI, VGA(YPbPr), CVBS,3G/HD/SD-SDI, HDBaseT					
Output Video Format	HDMI, DVI, VGA, CVBS,3G/HD/SD-SDI, HDBaseT					
Input Audio Format	3.5mm Phoenix terminal(VGA Interface) 3.5mm headphone terminal(other interfaces)					
Output Audio Format	3.5mm Phoenix terminal(VGA Interface) 3.5mm headphone terminal(other interfaces)					
Video Resolution	3840x2160@30Hz(2K series card) 3840x2160@60Hz (4K series card)					
HDMI Compliance	HDMI 1.4 (2K series card) HDMI 2.0(4K series card)					
Transmission Bandwidth	10.2Gbps (2K series card) 18Gbps(4K series card)					
Transmission Distance	HDMI: 1080P/15 meters, 4K30Hz/10 meters, 4K60Hz/5 meters HDBT: 1080P/70 meters or 100 meters* *Distance based on standard copper cable, longer transmission distance can be achieved using Vistrol Active Optical Cable (AOC).					
Control	Front panel push buttons, IR, RS232& LAN, Web GUI control					
Working Temperature	-20~+70					
Working Humidity	10%~90%					
Power Supply	100~240V50/60Hz					
RPSU Configuration Options	1+1	1+1	1+1	1+1	1+1/2/3	1+1/2/3
Power Consumption	100W	150W	350W	350W	550W	550W
Product Dimension	440X300X89mm (2U)	440X300X134mm (3U)	440X300X267mm (6U)	440X300X267mm (6U)	440X350X490mm (11U)	440x350x980mm (22U)
Product Weight	6.5Kg	8.3Kg	13.8Kg	14.2Kg	29Kg	52kg

Available Input and Output Card

HDMI Input Card (2K)

Model	iMX4-NE-HDMI-2KI
Channel	4 Channel HDMI Input Signals
HDMI Interface	HDMI Type A
Audio Interface	3.5mm Phoenix Terminal
HDMI and HDCP	HDMI 1.4, HDCP 1.4
Maximum Data Rate	10.2Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	3840x2160@30Hz, Backward Compatible



HDMI Input Card (4K)

Model	iMX4-NE-HDMI-4KI
Channel	4 Channel HDMI Input Signals
HDMI Interface	HDMI Type A
Audio Interface	3.5mm Phoenix Terminal
HDMI and HDCP	HDMI 2.0, HDCP 2.2
Maximum Data Rate	18Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	3840x2160@60Hz, Backward Compatible



DVI Input Card

Model	iMX4-NE-DVI-I
Channel	4 Channel DVI Input Signals
DVI Interface	DVI-I, 24+5 Female
Signal Format	DVI1.0 Specification for DVI-I Full-Digital TMDs Signals
Maximum Data Rate	4.95Gbps
Impedance	100Ω
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	1920x1200@60Hz, Backward Compatible.



SDI Input Card

Model	iMX4-NE-SDI-I
Channel	4 Channel SDI Input Signals
SDI Interface	BNC/Female
Signal Format	HD-SDI/3G-SD Standard and Support SMPTE259M, SMPTE292M, SMPTE424M, SMPTE292M/SMPTE424M and ITU Standard.
Maximum Data Rate	2.97Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Impedance	75Ω
Resolution	1920x1080@60Hz, Backward Compatible.



HDBaseT Input Card

Model	iMX4-NE-HDBT70-Rx
Channel	4 Channel HDBaseT Input Signals
HDBaseT Interface	RJ45
Audio Interface	3.5mm Headphone Terminal
HDMI and HDCP	HDMI 1.4, HDCP 1.4
Maximum Data Rate	10.2 Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Transmission Distance	70M
Resolution	3840x2160@30Hz, Backward Compatible.



HDBaseT Input Card

Model	iMX4-NE-HDBT100-Rx
Channel	4 Channel HDBaseT Input Signals
HDBaseT Interface	RJ45
Audio Interface	3.5mm Headphone Terminal
HDMI and HDCP	HDMI 1.4, HDCP 1.4
Maximum Data Rate	10.2 Gbps
Colour Depth	8/10/12-bit (1080P60Hz), 8-bit(4K30Hz)
Transmission Distance	100M
Resolution	3840x2160@30Hz, Backward Compatible.



VGA Input Card

Model	iMX4-NE-VGA-I
Channel	4 Channel VGA Input Signals
VGA Interface	DB15, 15-Pin Female
Signal Format	RGB (Analogue)
Audio Interface	3.5mm Headphone Terminal
Impedance	75Ω
Level	0.7Vp-p
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	1920X1200@60Hz, Backward Compatible



YPbPr (VGA) Input Card

Model	iMX4-NE-YPbPr-I
Channel	4 Channel YPbPr (VGA) Input Signals
VGA Interface	DB15, 15-Pin Female
Signal Format	RGB (Analogue)
Audio Interface	3.5mm Headphone Terminal
Impedance	75Ω
Level	0.7Vp-p
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	1920X1200@60Hz, Backward Compatible



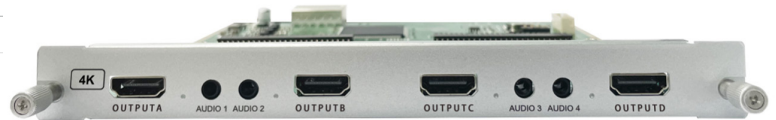
HDMI Output Card(2K)

Model	iMX4-NE-HDMI-2KO
Channel	4 Channel HDMI Output Signals
HDMI Interface	HDMI Type A
Audio Interface	3.5mm Phoenix Terminal
HDMI and HDCP	HDMI 1.4, HDCP 1.4
Maximum Data Rate	10.2 Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	3840x2160@30Hz, Backward Compatible. Support user-defined output resolution setting.



HDMI Output Card(4K)

Model	iMX4-NE-HDMI-4KO
Channel	4 Channel HDMI Output Signals
HDMI Interface	HDMI Type A
Audio Interface	3.5mm Phoenix Terminal
HDMI and HDCP	HDMI 2.0, HDCP2.2
Maximum Data Rate	18 Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	3840x2160@60Hz, Backward Compatible Support user-defined output resolution setting.



DVI Output Card

Model	iMX4-NE-DVI-O
Channel	4 Channel DVI Output Signals
DVI Interface	DVI-I, 24+5 Female
Signal Format	DVI1.0 Specification for DVI-I Full-Digital TMDs Signals
Maximum Data Rate	4.95Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Level	TMDs 400 ~ 600mVp-p
Impedance	100Ω
Resolution	1920x1200@60Hz, Backward Compatible. Support user-defined output resolution setting.



SDI Output Card

Model	iMX4-NE-SDI-O
Channel	4 Channel SDI Output Signals
SDI Interface	BNC/Female
Signal Format	SD-SDI, HD-SDI, 3G-SD Standard and Support
Maximum Data Rate	2.97Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Impedance	75Ω
Resolution	1920x1080@60Hz, Backward Compatible. Support user-defined output resolution setting



HDBaseT Output Card

Model	iMX4-NE-HDBT70-Tx
Channel	4 Channel HDBaseT Output Signals
HDBaseT Interface	RJ45
Audio Interface	3.5mm Phoenix Terminal
HDMI and HDCP	HDMI 1.4, HDCP 1.4
Maximum Data Rate	10.2 Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Transmission Distance	70M
Resolution	3840x2160@30Hz, Backward Compatible. Support user-defined output resolution setting.



HDBaseT Output Card

Model	iMX4-NE-HDBT100-Tx
Channel	4 channel HDBaseT Output Signals
HDBaseT Interface	RJ45
Audio Interface	3.5mm Phoenix Terminal
HDMI and HDCP	HDMI 1.4, HDCP 1.4
Maximum Data Rate	10.2 Gbps
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Transmission Distance	100m
Resolution	3840x2160@30Hz, Backward Compatible. Support user-defined output resolution setting.



VGA Output Card

Model	iMX4-NE-VGA-O
Channel	4 Channel VGA Output Signals
VGA Interface	DB15, 15-Pin Female
Signal Format	RGB (Analogue)
Audio Interface	3.5mm Phoenix Terminal
Impedance	75Ω
Level	0.7Vp-p
Colour Depth	8/10/12-bit (1080P60Hz); 8-bit (4K30Hz)
Resolution	1920x1200@60Hz, Backward Compatible. Support user-defined output resolution setting.



HDBT Receiver

Model	iMX4-NE-HDBT70-Rx
HDBaseT Interface	1 x Cat 6 (RJ45)
HDMI Interface	1 x HDMI Female
IR Interface	1 x IR TX1 x IR RX
Control Interface	1 x Pheonix Connector
Power Supply	DC 24V 1A
Power Over Cable (POC)	Supported
Transmission Distance	70M



HDBT Transmitter

Model	iMX4-NE-HDBT70-Tx
HDBaseT Interface	1 x Cat 6 (RJ45)
HDMI Interface	1 x HDMI Female
IR Interface	1 x IR TX1 x IR RX
Control Interface	1 x Pheonix Connector
Power Supply	DC 24V 1A
Power Over Cable (POC)	Supported
Transmission Distance	70M



HDBT Receiver

Model	iMX4-NE-HDBT100-Rx
HDBaseT Interface	1 x Cat 6 (RJ45)
HDMI Interface	1 x HDMI Female
IR Interface	1 x IR TX1 x IR RX
Control Interface	1 x Pheonix Connector
Power Supply	DC 24V 1A
Power Over Cable (POC)	Supported
Transmission Distance	100M



HDBT Transmitter

Model	iMX4-NE-HDBT100-Tx
HDBaseT Interface	1 x Cat 6 (RJ45)
HDMI Interface	1 x HDMI Female
IR Interface	1 x IR TX1 x IR RX
Control Interface	1 x Phoenix Connector
Power Supply	DC 24V 1A
Power Over Cable (POC)	Supported
Transmission Distance	100M

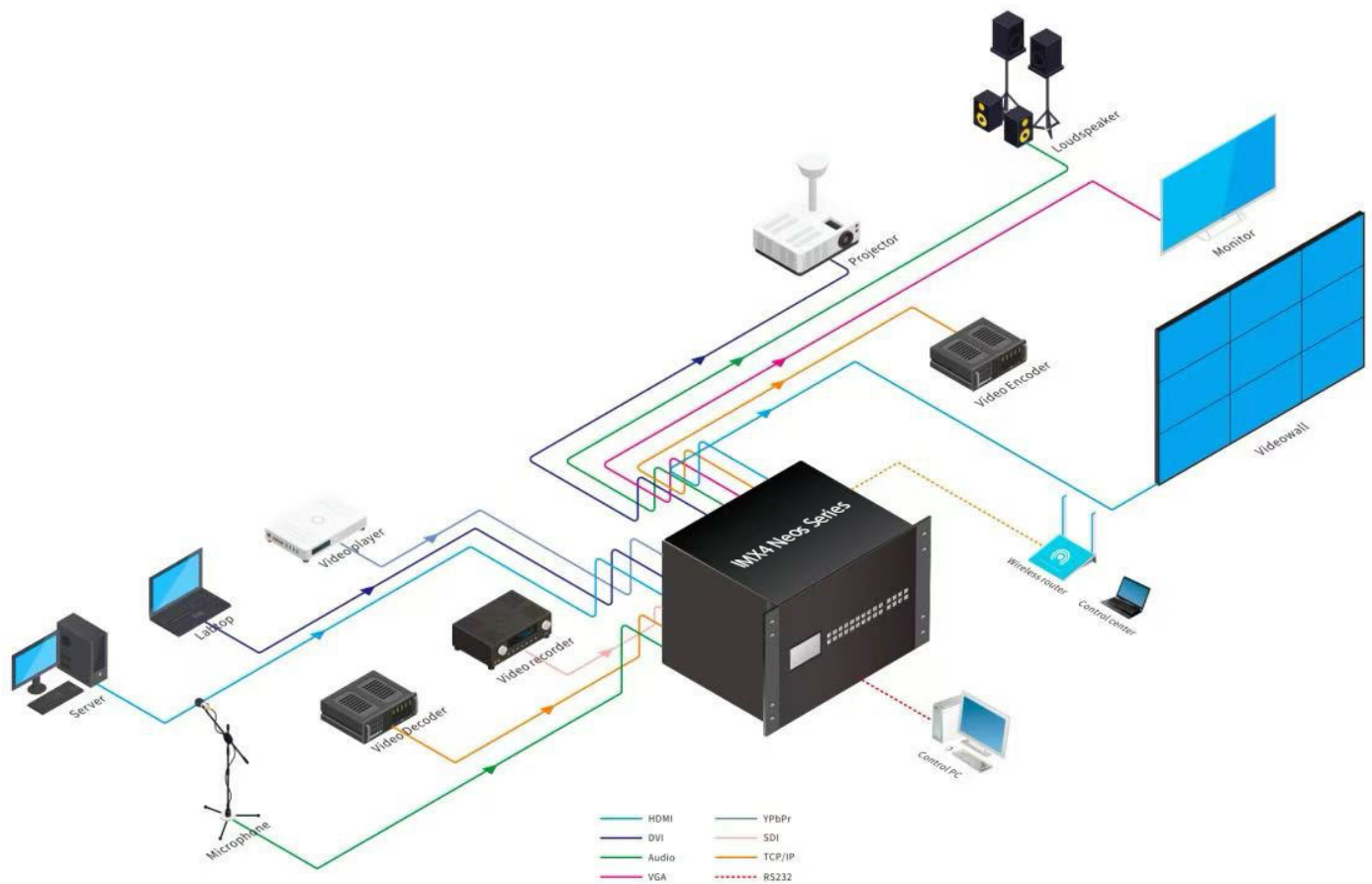


Redundant Power Supply

Model	iMX4-NE-RPSU
Input Voltage	AC 100-200V
Frequency	50 / 60 Hz



System Diagram



* All Features and Specification are subject to change without notice.

Vistrol

Singapore | Malaysia

w www.vistrol.com
e sales@vistrol.com

For any enquiry, please send email to sales@vistrol.com

ISO 9001:2005 Certified Company:



R00
Ver. 1.8