

MP-IP500E / MP-IP500D / MP-IP500C1

18G HDMI over 1G IP Encoder, Decoder & IP Control Box

18G HDMI over 1G IP Encoder & Decoder



4K IP Streaming Extender

The MP-IP500 series is a network AV extension platform supporting HDMI transmission over a 1GbE IP network, with control signals over CATx cable up to 100m. It combines 4K video, audio, IR, RS232 and scalable IP distribution.

Models: MP-IP500E Encoder • MP-IP500D Decoder • MP-IP500C1 IP Control Box

Key Features

• Streams 4K video with 1-frame latency .	• Supports HDMI up to 4K@60Hz 4:4:4 8bit .
• Transports RS232 and IR signals between units.	• Video Wall mode up to 9×9 screens .
• Selectable output resolutions with up to 4K scaling .	• Additional 3-pin terminal block for audio embedding.
• IP Control Box for TCP/IP control.	• Web-UI based configuration and management.

Application Modes

EXTENDER	SPLITTER	MATRIX SWITCHER
Point-to-Point No switch required. Distributes full 4K@60Hz 4:4:4 up to 100m.	One-to-Many One transmitter plus a 1G Ethernet switch can distribute A/V to a near-limitless number of receivers and screens.	Many-to-One / Many-to-Many Scalable routing of video, audio and control signals between sources and endpoints.

Network / Control: 1GbE IP distribution • Web-UI control • Optional MP-IP500C1 IP Control Box • PoE supported on 1G LAN port.

Source basis: Specifications and capabilities are taken directly from the supplied MP-IP500 user manual (Version MP-IP500_2023V1.0).

Technical Specifications

MP-IP500E Encoder • MP-IP500D Decoder • MP-IP500C1 IP Control Box

MP-IP500E — Encoder

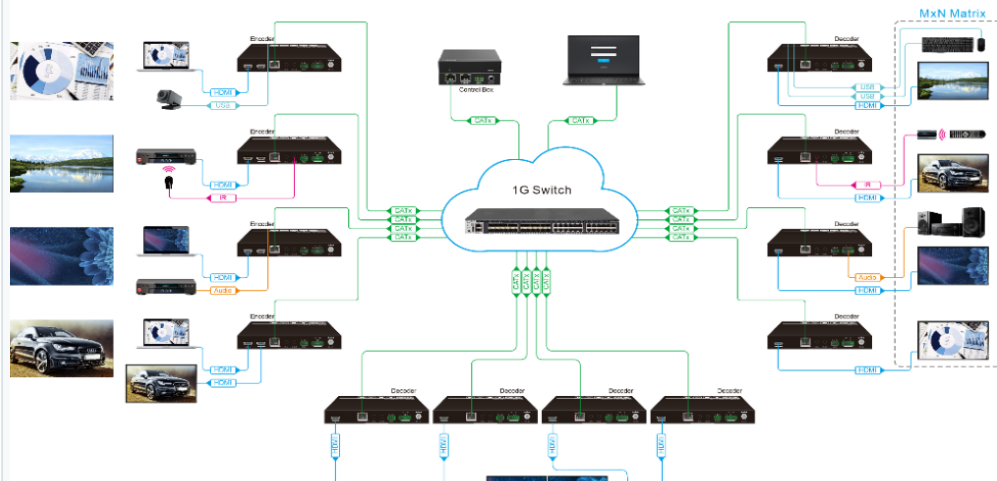
Parameter	Specification
Video Input	(1) HDMI; Type-A female HDMI
HDMI Input Resolution	Up to 4K@60Hz 4:4:4 8bit
Audio Input	(1) Analog Audio In; 3-pin terminal block
Video Output	(1) IP Stream + (1) HDMI
Video Output Connectors	(1) RJ45 + (1) Type-A female HDMI
HDMI Output Resolution	Up to 4K@60Hz 4:4:4 8bit
Audio Output	(1) IP Stream + (1) De-embedding Output
Audio Output Connectors	(1) RJ45 + (1) 5-pin terminal block
Control	(1) IR IN, (1) IR OUT, (1) RS232, (1) host
Control Connectors	(2) 3.5mm jack, (1) 3-pin terminal block, (1) USB-B
Operating Temperature	-10°C to +55°C
Storage Temperature	-25°C to +70°C
Relative Humidity	10%–90%
Power Consumption	7.8W max
Dimensions (W×H×D)	180 × 142.7 × 25 mm
Net Weight	570 g

MP-IP500D — Decoder

Parameter	Specification
Video Input	(1) IP Stream via RJ45
Video Output	(1) HDMI; Type-A female HDMI
HDMI Output Resolution	Up to 4K@60Hz 4:4:4 8bit
Audio Output	(1) Analog audio output; 5-pin terminal block
Audio Sample Rate	48 kHz, 96 kHz, 192 kHz
THD+N	< 0.05% (-80dB), 20Hz–20kHz bandwidth, 1kHz sine at 0dBFS
Frequency Response	20Hz–20kHz, ±1dB
SNR	> 90 dB, 20Hz–20kHz bandwidth
Crosstalk Isolation	< -80 dB, 10kHz sine at 0dBFS
Noise Level	< -80 dBu
Control	(1) IR IN, (1) IR OUT, (1) RS232
Control Connectors	(2) 3.5mm jack, (1) 3-pin terminal block
Power Consumption	11.52W max
Dimensions / Weight	180 × 142.7 × 25 mm / 570 g

System Diagram

The following diagram illustrates typical input and output connections that can be utilized with the MP-IP500:



The manual's matrix system diagram illustrates multiple encoders and decoders connected through a 1G network, with displays and a video wall at the endpoints.

Panel / Mechanical Drawing

6. Panel Drawing

