DHI-M80-S24

VIDEO MATRIX PLATFORM HOST

Functions

Flexible Card Selection

Designed for easy card insertion, you can freely insert video input and output cards into the system without restrictions.

Lossless Image Quality

Acquires and displays images and videos in RGB888 format while processing them in YUV444 format, ensuring that videos are presented in high quality with lossless representation.

Stable Resolution Even at 4K

Supports acquiring and outputting signals at 4K@60 Hz, providing ultra-high resolution output through advanced video capture and splicing techniques.

Main and Hot Standby Control

Seamlessly switches between active and standby control cards, ensuring that videos and images from the signals are displayed without interruption on the video wall during the transition.

Strong Decoding Capability

Supports a maximum decoding capability of 36-channel 1080p signals for a single output port, with an overall capacity to decode up to 864-channel 1080p signals.

Easy O&M through the Touch Screen

The touch screen makes it convenient to perform operation and maintenance as it visually displays the running status of the device.

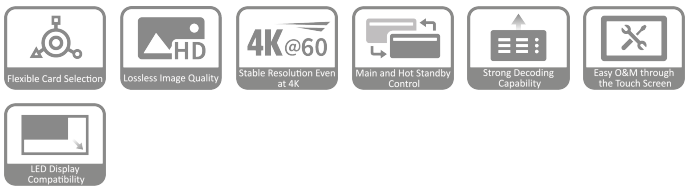
LED Display Compatibility

The resolution can be customized for output ports, ensuring optimal compatibility with LED displays.

Effortless Integration with Security Platforms

Seamlessly integrates with Dahua's general and industry-specific platforms, creating a complete end-to-end solution for the security industry.

- Standard 19" 8U rack-mounted server with ATCA telecommunication-grade architecture.
- 24 slots for audio and video cards.
- Offers redundant dual power supply, making it highly suitable for locations such as machine rooms.
- The intelligent fan can be automatically adjusted to moderate the temperature, ensuring the stability and reliability of the system.
- Adopts the H.265 video compression standard, offering support for dual stream technology and variable bit rates. It can encode both composite and video streams while ensuring audio and video synchronization during composite stream encoding.
- Supports mainstream video signal interfaces such as DP, HDMI, and DVI.
- Supports input of up to 96 channels at 1080p@60 Hz for HD encoding, or 48 channels at 4K@60 Hz for UHD encoding.
- Supports up to 96 channels of 4K signal output through HDMI ports, allowing for seamless splicing across up to 96 screens.
- Decodes videos in 32 MP, 16 MP, 12 MP, 8 MP, 5 MP, 3 MP, 1080p, 720p, and D1. Only H.265 can be used to decode videos in 32 MP, 16 MP and 12 MP.
- Supports processing multiple copies of signals, utilizing a maximum of 32 output channels for each signal.
- The device can be freely controlled through the webpage, desktop client, mobile client and network keyboard.
- Features splicing, scaling, video integration, roaming, windowing, and OSD.
- Splits to 1, 4, 6, 8, 9, 16, 25, and 36 windows. You can also customize the split windows.
- Up to 128 presets can be set for scenes. You can also customize the layout of each scene on the video wall.
- Displays the background image in high definition.
- Offers subtitles that can be overlayed and displayed on both single and spliced screens. You can customize the font style and color, character spacing, background color, and speed to suit your preferences.
- Four 2.5 Gbps RJ-45 ports and two 10 Gbps optical ports.



Scene

Suitable for command centers, monitoring centers, operation centers, digital exhibition halls and more scenes.

Technical Specification

System

Main Processor	64 high-performance octa-core processor
Operating System	Embedded Linux operating system
Bus	Dual bus for the network and serial port
Slot	27 slots in total. Each of the following items has its own slot: the switching card and main control card. The central control card is reserved. Additionally, there is a shared slot that can accommodate either the main control card or an audio and video card. The remaining 23 slots are reserved for audio and video cards. Furthermore, the audio and video cards can be freely inserted into their slots without restrictions.
Cabinet	Standard sized cabinet with a dual power supply and intelligent temperature control fan. It supports the installation of a dual main control card.

Port

USB	1 × USB 3.0 port and 1 × USB 2.0 port
Network Port	4 × 2.5 Gbps RJ45 port and 2 × 10 Gbps optical port
RS-232	2
RS-485	2
HDMI	1 (reserved)
Alarm Input Port	2 (reserved)
Alarm Output Port	2 (reserved)
Audio Input Port	One 3.5 mm jack port (reserved)
Audio Output Port	One 3.5 mm jack port
Type-C Port	1 Type-C port that supports USB 2.0

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Video Input	2-channel HDMI 2.0 port and 2-channel DP 1.2 port. Either one can be set for each input channel.
Audio Input	2-channel HDMI/DP embedded audio port and 2-channel 3.5 mm jack port.
Encoding Format	H.265
Encoding Capability	• Mode A: Supports up to 2-ch 4096 × 2160@60 Hz in YUV420 format. • Mode B: Supports up to 2-ch 4096 × 2160@30 Hz in YUV444 or YUV420 format. • Mode C: For the first channel, it supports up to 4096 × 2160@30 Hz in YUV444 or YUV420 format. For the second channel, it supports up to 1920 ×1080@60 Hz in YUV444 or YUV420 format.
Audio Encoding Format	PCM; G711.A

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Video Input	4 × HDMI 1.3 ports
Audio Input	4-channel HDMI embedded audio port and 4-channel 3.5 mm jack port.
Encoding Format	H.265
Encoding Capability	Supports up to 4-channel 1920 × 1200@60Hz in YUV444 or YUV420 format.
Audio Encoding Format	PCM; G711.A

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Video Output	4 × HDMI 2.0 ports. The maximum output resolution is 4-ch 4096 × 2160@60 Hz. You can customize the output resolution.
Video Format	Supports decoding videos in H.265, H.264, MJPEG, MJPEG4, SVAC and MPEG2 formats.
Decoding Capability	Supports performing real-time decoding of network videos based on the following capabilities: 2-ch 32 MP@25 fps 4-ch 8 MP@60 fps 8-ch 8 MP@30 fps 36-ch 1080p@30 fps. Only H.265 can be used to decode videos in 32 MP.
Decoding Resolution	Decodes videos in 32 MP, 16 MP, 12 MP, 8 MP, 5 MP, 3 MP, 1080p, UXGA, 720p, D1, HD1, 2CIF, CIF and QCIF. Only H.265 can be used to decode videos in 32 MP, 16 MP and 12 MP.
Video Output Resolution	Supports the following resolutions: 4096 × 2160@60 Hz 3840 × 2160@60 Hz 4096 × 2160@24 Hz 3840 × 2160@30 Hz 2080 × 1560 @60 Hz 2048 × 1152@60 Hz 1920 × 1200@60 Hz 1920 × 1080@60 Hz 1280 × 1024@60 Hz 1280 × 720@60 Hz 1024 × 768 @60 Hz Supports custom resolution output, but the width and height must not exceed the highest default resolution of the system.
Multi-screen Display	Splits to 1, 4, 6, 8, 9, 16, 25, and 36 windows, and supports M × N custom split.

Function

Interoperability	ONVIF, RTSP, Dahua Private, Hikvision Private
Transmission Protocol	TCP, UDP, RTP, RTSP, RTCP
Max System Configuration	Supports installation of up to 24 audio and video cards. The maximum output resolution is 96-ch 4K@60 Hz. The maximum input resolution is 96-ch 1080p@60 Hz or 48-ch 4K@60 Hz.
Network Signal Access	Up to 1,024 network channels can be accessed.
Screen Splicing	Splices up to 96 screens.
Spliced Screen Function	Splicing and zoom, video integration, roaming, windowing, and OSD.
Equipment Management	Supports local signals and network signals, and custom signal groups.
SDK	Supports secondary development, and provides platform SDK.
Control Mode	Operations can be performed directly through the device's touch screen. You can also connect to the device through the webpage, desktop client, mobile client and network keyboard.
Multi-screen Display	Splits to 1, 4, 6, 8, 9, 16, 25, and 36 windows, and supports M × N custom split.

General

Power Supply	100–127 VAC or 100–240 VAC, 50–60 Hz, 10/5 A, hot swapping

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Power Redundancy	Dual
Power Consumption	≤1200 W
Operating Temperature	–10 °C to +50 °C (+14 °F to +122 °F)
Operating Humidity	10%–90% (non-condensing)
Storage Temperature	–10 °C to +50 °C (+14 °F to +122 °F)
Storage Humidity	10%–90% (non-condensing)
Product Dimensions	354.8 mm × 484.0 mm × 409.2 mm (13.94" × 19.06" × 16.11") (H × W × D)
Packaging Dimensions	554 mm × 622 mm × 563 mm (21.81" × 24.49" × 22.13") (H × W × D)
Gross Weight	28 kg (61.73 lb)
Net Weight	23 kg (50.71 lb)

Ordering Information

Type	Model	Description
VIDEO MATRIX PLATFORM	DHI-M80-S24	VIDEO MATRIX PLATFORM HOST

Accessories

Optional:

DHI-VEC0205EHP-M80
VIDEO MATRIX PLATFORM
ENCODING CARD

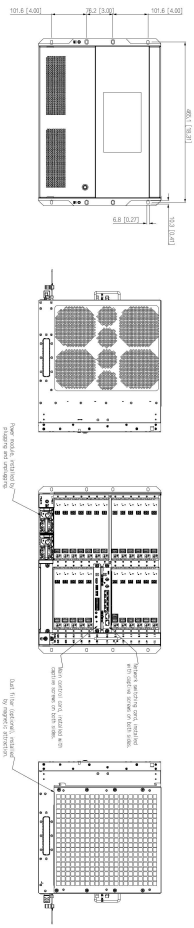
MBC-M80
VIDEO MATRIX
PLATFORM MAIN CARD

DHI-VDC0405EH-M80
VIDEO MATRIX PLATFORM
DECODING CARD

DHI-VEC0405HH-M80
VIDEO MATRIX PLATFORM
ENCODING CARD

FIT-P-M80-8U
VIDEO MATRIX
PLATFORM DUST FILTER

NSW-M80
VIDEO MATRIX PLATFORM
SWITCHING CARD



Dimensions (mm[inch])