

MA1000-V0803

Network Video Decoder

Data Sheet

Introduction

MA1000-V008 is a digital decoding server with excellent performance, designed for video surveillance system, equipped with embedded Linux system, stable and reliable. The device supports ultra-high-definition decoding, splicing, splitting, windowing, etc. It can efficiently realize the functions of decoding on the wall, multi-signal input coding, etc., to meet the needs of big data digital surveillance system. It is compatible with the standard ONVIF protocol and supports NVR/DVR devices of mainstream brands (such as Hikvision, Dahua, YUVAD, Xiongmai) for real-time preview and video playback. At the same time, through the external HDMI input coding card, external computer signals can be displayed on the wall or splicing, providing high flexibility for system expansion.

Widely used in supermarkets, office buildings, schools, hotels, factories, transportation, security and other monitoring places, to help users easily realize video surveillance switching and computer wall management.

Features

1. Integrated Gigabit Switch Backplane — Each network cable can drive up to 7 decoding boards (or 14 via two cables), ensuring stable data transmission and strong anti-interference performance.
2. Modular Card-Based Structure — 1U chassis supports 14 HDMI outputs, 5U supports 28 outputs, and 10U or larger custom models are available. Multiple units can be cascaded for large video wall installations.
3. HDMI 2.0 Output — Each module provides one HDMI 2.0 interface (backward compatible with HDMI 1.3) for smooth and vivid 4K@60Hz display.
4. Supports H.265 / H.264 / MPEG4 / MJPEG / JPEG decoding for a wide range of video streams.
5. Single card supports 16-channel IP camera decoding or 16 split-screen display on one HDMI output.
6. Full configuration supports up to 64×1080P channels decoded and displayed simultaneously.
7. 1× 5MP, 4× 1080P, 9× 720P, 16× D1 channels per card.
8. Compatible with PAL/NTSC standards and streaming protocols such as RTSP, RTP, and TS.
9. Works seamlessly with ONVIF-compliant IP cameras and major brands like Hikvision, Dahua, Uniview, Huawei, XM, Tiandy, Hanbang, and others.
10. Compatible with mainstream NVR/DVR/XVR devices for live preview and playback.
11. Fully supports GB28181 national standard protocol and provides SDK for third-party software integration.
12. Built-in Web UI allows users to configure, preview, and manage decoding tasks directly on screen using a mouse.
13. Supports network keyboard control and PC client software for visual operation (up to 20 live views).
14. On-screen menu overlay via HDMI enables direct local configuration without a PC.

15. Supports automatic and manual scene recall, with up to 128 layout presets and scheduled group rotation.
16. Embedded database allows importing/exporting of IPC parameters for large projects.
17. Automatic network status detection and real-time monitoring for stable performance.
18. Online firmware upgrade supported for simplified maintenance.
19. Optional HDMI input card available for displaying PC desktops or set-top box sources on the video wall.

Specification

Board interface	
Outputs	1* HDMI
Ethernet port	1* RJ45
USB	2* USB2.0
Video Parameters	
Decoding format	H.265/H.264/MPEG4
Network video input	500W/1080P/720P/D1
Output resolution	3840x2160@60HZ 1920x1080@60HZ 1366x768@60HZ 1280x720@60HZ
Video decoding display	1 screen = 500W; 4 screen =200W ; 6 screen = 720P ; 8 screen = 720P ; 9 screen = 720P ; 10 screen =D1; 16 screen =D1
Single screen split display	Support 1/4/6/8/9/10/16split
OSD information	Supports Chinese and English character overlay, single-line OSD window, and warning information display
Single machine output interface	Cascade up to 96 output screens
Management and maintenance	
Basic application	Support user login and logout
Upgrade	Support network upgrade
Customize	Support emergency plan, grouping, patrol
Other	
Platform docking	Provide SDK, support third-party software access control;
Alarm input	Support network alarm host switch signal access and linkage pop-up window;
Decoding display response	≤1 second
Power supply	220V

Power consumption	≤160W
Working environment	Temperature: -10°C — +55°C Humidity: 10% — 90%

System Diagram

