MxNVR-IA8 Series

8-channel industrial network video recorders for harsh environments

> Supports H.264, MPEG4, and MJPEG video recording
> Can record up to 8 VPort video stream channels
> Supports video recording by schedule and event record
> Built-in 2x2.5" SATA hard disk interface for storage hard disks*
> -40 to 75°C operating temperature (requires solid state disk)
> Modbus/TCP supported for direct communication with SCADA systems
> Supports IEEE 802.1X for high network security
> Robust, fanless, 19" rackmount design

*Hard disk not included in standard package

Introduction

The MxNVR-IA8 is a revolutionary new 8-channel industrial network video recorder designed for recording the VPort's MJPEG, MPEG4, and H.264 video streams in harsh environments. With rugged design features, such as no heater or fan, a -40 to 75°C operating temperature, and protection against high EMI and surges, as well as the ability to save bandwidth when transmitting video streams back to the remote control center or machine room for video recording, the MxNVR-IA8 is tailor-made for field site applications. Since videos are only transmitted when remote live view and video playback are required, you will see an improvement in network transmission efficiency and a noticeable reduction in your bandwidth investments.

Specifications

Recording
No. of Streams: 8 VPort video/audio streams
Stream Types: H.264, MPEG4, MJPEG
Video Input: via Ethernet
Video File Format: AVI
Record Modes: Manual, schedule, alarm
Pre-alarm Recording: Up to 30 sec.
Post-alarm Recording: Up to 60 sec.

Searching
Search Modes: Camera, date/time, event

Playback
Method: Remote access, FTP file download
Remote Access: Playback via web browser or client software
FTP File Downloads: Playback via popular media player (requires FFDShow)

Storage
Disk Interface: 2 2.5" SATAII sockets
Note: Storage disks are not included. Users will need to purchase 2.5" hard disks or SSDs (solid state disks) from a hard disk vendor.

Network
Protocols: TCP/IP, UDP, HTTP, SMTP, NTP, DNS, DHCP, UPnP, RTP, RTSP, ICMP, IGMPv3, SNMPv1/v2c/v3, DDNS, FTP, Modbu/TCP, 802.1X
Ethernet: 1 auto-sensing 10/100/1000BaseT(X) RJ45 connector
Connections: 10

Data Ports (reserved for future use)
COM Ports: 2 RS-232/422/485 ports, with DB9 male connectors (for external devices)
USB Ports: 1 USB 2.0 port

GPIO
Digital Inputs: 6, source type, 0 to 5 VDC at 15 Hz
Level 0: Close to GND
Level 1: Open
Digital Outputs: 2, source type, 0 to 5 VDC, max. 20 mA
Level 0: 0 to 0.55 V
Level 1: 4.2 to 5.0 V

LED Indicators
STAT: Indicates if system has booted up and is operating properly
PWR: Power
HDD: Indicates if the hard disk is or is not working
FAULT: Can be set up to correspond with system alarms—video loss or network down
Video 1/2/3/4/5/6/7/8: The status of video channels 1 to 8

Power Requirements
Input Voltage: 1 24 VDC power input with 3-pin terminal block connector
Power Consumption: Max. of 20 W (with 2 2.5" hard disks)

Physical Characteristics
Housing: Metal
Dimensions: 440 x 44 x 325 mm (17.32 x 1.73 x 12.8 in)
Installation: 19" rackmount

Security
Password: User level password protection
Filtering: By IP address
Authentication: 802.1X

Environmental Limits

Operating Temperature:
Standard Models: 0 to 60°C (32 to 140°F)
Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 60950-1
EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A
EMS:
EN61000-4-2 (ESD), Level 3,
EN61000-4-3 (RS), Level 3,
EN61000-4-4 (EFT), Level 2,
EN61000-4-5 (Surge), Level 3,
EN61000-4-6 (CS), Level 3,
EN61000-4-8,
EN61000-4-11
Note: Please check Moxa's website for the most up-to-date certification status.

Warranty

Warranty Period: 5 years
Details: See www.moxa.com/warranty

System Requirements
Minimum Viewing System Requirements

CPU: Pentium 4, 2.4 GHz or above
Memory: 512 MB memory or above
OS: Windows XP/2000 with SP2 or above
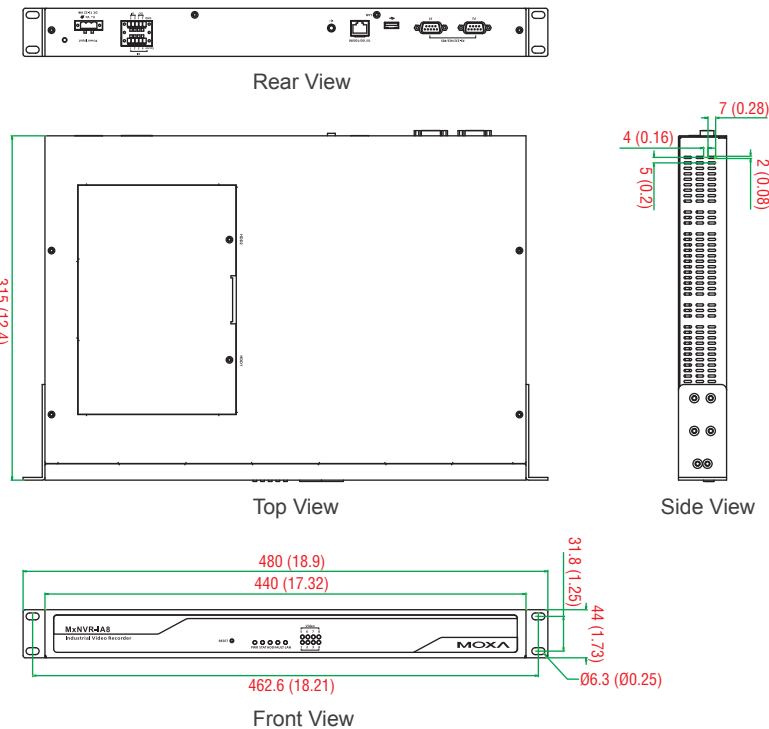**Browser:** Internet Explorer 6.x or above
Multimedia: DirectX 9.0c or above

Software Development Kit

VPort SDK PLUS: Includes CGI commands, ActiveX Control, and API library for customized applications or system integration for third-party developers (the latest version of SDK is vailable for download from Moxa's website).

Dimensions

Unit: mm (inch)

Rear View

315 (12.4)

Top View

7 (0.28)
4 (0.16)
5 (0.2)
2 (0.08)

Side View

480 (18.9)
440 (17.32)
31.8 (1.25)
44 (1.73)
Ø6.3 (Ø0.25)
462.6 (18.21)

MxNVR-IA8
Industrial Video Recorder

MOXA

Front View

: Ordering Information

Available Models

MxNVR-IA8: 8-channel industrial network video recorder, 1 10/100/1000BaseT(X) Ethernet port, 24 VDC power input, 0 to 60°C operating temperature
MxNVR-IA8-T: 8-channel industrial network video recorder, 1 10/100/1000BaseT(X) Ethernet port, 24 VDC power input, -40 to 75°C operating temperature
Note:
• The MxNVR-IA8 does not include an SSD; users must purchase a drive separately
• The MxNVR-IA8-T must use SSDs (Solid State Disks) capable of operating in a -40 to 75°C temperature range.

Optional Accessories (can be purchased separately)

DR-4524/75-24/120-24: 45/75/120 W DIN-Rail 24 VDC power supplies
MDR-40-24/60-24: 40/60 W DIN-Rail 24 VDC power supplies, -20 to 70°C operating temperature

Package Checklist

- MxNVR-IA8 network video recorder
- 2 rackmount ears with screws
- 4 pads
- 3-pin terminal block for power input
- 2 5-pin terminal blocks for 6 DIs and 2 DOs
- Quick installation guide (printed)
- Documentation and software CD
- Warranty card