

VPort 254 Series

Rugged 4-channel MJPEG/MPEG4 industrial video encoders



- > Industrial design with -40 to 75°C operating temperature and fiber optic Ethernet port
- > Video stream up to 120 frames/sec at CIF (352 x 240) resolution
- > Modbus/TCP supported for easy communication with SCADA software
- > One RS-232/422/485 COM port for controlling external serial devices over Ethernet
- > Free VPort SDK PLUS supported



Introduction

The rugged VPort 254 is a 4-channel industrial video encoder that provides up to 120 FPS at CIF resolution (NTSC: 352 x 240; PAL: 352 x 288), and supports an optional MJPEG/MPEG4 algorithm, making it especially well suited for use with distributed surveillance systems in critical industrial applications. In addition, the VPort 254 supports

serial-to-Ethernet and Modbus/TCP communications for integrating automation systems, and 2-way audio is provided to allow real-time communication between system administrators located at a central site and engineers in the field.

Specifications

Video

Video Compression: MJPEG or MPEG4 (ISO/IEC 14496-2)
Video Inputs: 4, BNC connector (1.0 Vpp, 75 ohms)
Video Outputs: via Ethernet port
NTSC/PAL: Auto-sensing or manual
Video Resolution and FPS (frames per second):

	NTSC		PAL	
	Size	Max. FPS	Size	Max. FPS
QVGA	320 x 240	30	320 x 288	25
CIF	352 x 240	30	352 x 288	25
VGA	640 x 480	7	640 x 576	7
4CIF	704 x 480	7	704 x 576	7
Full D1	720 x 480	7	720 x 576	7

Video Viewing:

- Adjustable image size and quality
- Timestamp and text overlay

Audio

Audio Inputs: 1 Line-in or MIC-in with RCA connector
Audio Outputs: 1 Line-out with RCA connector
Audio Format: Mono, PCM

Network

Protocols: TCP, UDP, HTTP, SMTP, FTP, Telnet, NTP, DNS, DHCP, UPnP, RTP, RTSP, ICMP, IGMPv3, QoS (ToS), SNMPv1/v2c/v3, DDNS, Modbus/TCP

Ethernet: 1 10/100BaseT(X) auto negotiating RJ45 port, or 1 100BaseFX fiber port (single/multi-mode, SC connector)

Serial Port

PTZ Ports: 1, RS-232/422/485 port (terminal block connector), max. speed of 115.2 Kbps

COM Ports: 1, RS-232/422/485 port (DB9 female connector), max. speed of 115.2 Kbps

Console Port: 1, RS-232 RJ45 port

GPIO

Digital Inputs: 4, max. 8 mA
 Low: +13 V to +30 V; High: -30 V to +3 V
Relay Outputs: 2, max. 24 VDC @ 1 A

LED Indicators

STAT: Indicates if the system booted properly or not
PWR1: Power 1
PWR2: Power 2

FAULT: Can be configured to correspond to system alarm, power failure, or disconnected network

V1, V2, V3, V4: Video input signal activity

Power Requirements

Input Voltage: 2 12/24 VDC or 24 VAC inputs for redundancy
Power Consumption: Approx. 10 W

Physical Characteristics

Housing: Metal, IP30 protection
Dimensions: 80.2 x 135 x 105 mm (3.16 x 5.31 x 4.13 in)
Weight: 1100 g (2.42 oz)
Installation: DIN-Rail mounting, wall mounting (with optional kit)

Alarms

Video Loss: Video loss alarm
Scheduling: Daily repeat timing schedule
Imaging: JPEG snapshots for pre/trigger/post alarm images
Email/FTP Messaging: Automatic transfer of stored images via email or FTP with event-triggered actions

PAN/TILT/ZOOM

PTZ Camera Control: Via RS-232/422/485 PTZ port or COM port
PTZ Control Functions: PAN, TILT, ZOOM, FOCUS, moving speed, preset position (max. 25 positions), and 10 custom commands
PTZ Function Updates: Driver upload supported
Supported Device Protocols: Pelco D, Pelco P, Dynacolor DynaDome, Custom Camera
Transparent PTZ Control: Control PTZ cameras with legacy PTZ control panel or keyboard connected to a PC or VPort decoder

Security

Password: User level password protection

Filtering: By IP address

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 508

EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A

EMS:

EN 61000-4-2 (ESD), Level 2,

EN 61000-4-3 (RS), Level 3,

EN 61000-4-4 (EFT), Level 3,

EN 61000-4-5 (Surge), Level 3,

EN 61000-4-6 (CS), Level 3,

EN 61000-4-8,

EN 61000-4-11

Shock: IEC 60068-2-27

Freefall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Note: Please check Moxa's website for the most up-to-date certification status.

MTBF (mean time between failures)

Time: 197,000 hrs

Database: Telcordia (Bellcore), GB 25°C

Warranty

Warranty Period: 5 years

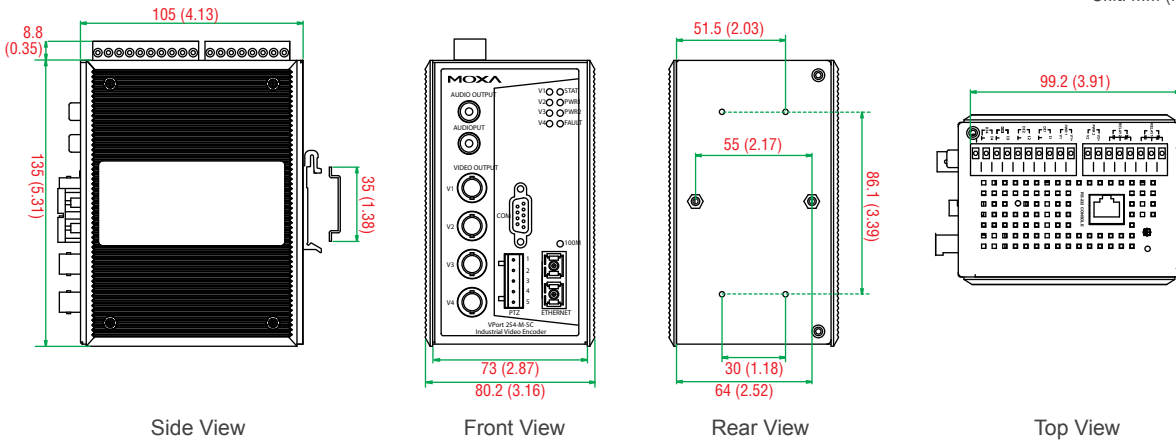
Details: See www.moxa.com/warranty

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 available for download from Moxa's website).

Dimensions

Unit: mm (inch)



Ordering Information

Available Models		Port Interface		
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 75°C)	10/100BaseT(X)	Multi-mode, SC Connector	Single-mode, SC Connector
VPort 254	VPort 254-T	1	-	-
VPort 254-M-SC	VPort 254-M-SC-T	-	1	-
VPort 254-S-SC	VPort 254-S-SC-T	-	-	1

Optional Accessories (can be purchased separately)

SoftNVR-IA V3.0: 64-channel IP surveillance software for industrial automation applications

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

WK-46: Wall mounting kit

RK-4U: 4U-high 19" rack mounting kit

Package Checklist

- VPort 254 video encoder
- 10-pin terminal block for 1 power input and 4 digital inputs
- 8-pin terminal block for the other power input and 2 relay outputs
- 5-pin terminal block for the RS-232/422/RS-485 PTZ control port
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card