

# VPort 354 Series

**Full motion, 4-channel MJPEG/MPEG4 industrial video encoders**



- > Industrial design with -34 to 74°C operating temperature and fiber optic Ethernet port
- > 2 Ethernet ports for cascade and port redundancy
- > SD card slot for local storage capability
- > Modbus/TCP supported for easy communication with SCADA software
- > Video stream up to 120 frames/sec at 4CIF (704 x 480) resolution



## Introduction

The VPort 354 is a high performance, 4-channel industrial video encoder that provides up to 4CIF full frame rate performance (NTSC: 704 x 480 @ 30 FPS; PAL: 704 x 576 @ 25 FPS) for each channel, and supports a dual MJPEG/MPEG4 algorithm, making it especially well-suited for use with distributed surveillance systems in critical industrial applications. In addition to the rugged-design features, the Modbus/

TCP and serial-to-Ethernet connectivity make the VPort 354 more suitable for industrial applications. The two built-in Ethernet ports can be cascaded as a daisy-chain or used for port redundancy, making network communication more safe and reliable. To prevent video loss when the network is down, the VPort 354 can automatically record video on an SD card, and once the network is back up, the recorded video can be downloaded via FTP access.

## Specifications

### Video

**Video Compression:** MJPEG or MPEG4 (ISO/IEC 14496-2)

**Video Inputs:** 4, BNC connector (1.0 Vpp, 75 ohms)

**Video Streams:** Dual streams (one for MJPEG, the other for MPEG4) at the same video resolution (note that MJPEG only has one quality setting)

**NTSC/PAL:** Auto-sensing or manual

**Video Resolution and FPS (frames per second):**

	NTSC		PAL	
	Size	Max. FPS	Size	Max. FPS
QCIF	176 x 112	30	176 x 144	25
CIF	352 x 240	30	352 x 288	25
2CIF	704 x 240	30	704 x 288	25
4CIF	704 x 480	30	704 x 576	25

### Video Viewing:

- Adjustable image size and quality
- Timestamp and text overlay

**Video Output:** Via Ethernet port

### Audio

**Audio Inputs:** 1 Line-in or MIC-in with RCA connector

**Audio Outputs:** 1 Line-out with RCA connector

### Network

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

**Ethernet:** 2 10/100BaseT(X) auto negotiating RJ45 ports, or 2 100BaseFX fiber ports (single/multi-mode, SC connector)

### Serial Port

**PTZ Ports:** 1, RS-232/422/485 port (terminal block connector), max. speed of 115.2 Kbps, with 15 KV ESD protection

**COM Ports:** 1, RS-232/422/485 (DB9 female connector), max. speed of 115.2 Kbps, with 15 KV ESD protection

**Console Port:** 1 RS-232 RJ45 port

### GPIO

**Digital Inputs:** 4, max. 8 mA

High: +13 to +30 V; Low: -30 to +3 V

**Relay Outputs:** 2, max. 24 VDC @ 1 A

### LED Indicators

**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

### Local Storage

**SD Socket:** Standard SD socket, SDHC, with SD LED indicator

### Power Requirements

**Input Voltage:** 2 12/24 VDC or 24 VAC inputs for redundancy

**Power Consumption:** Approx. 12 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:** 1200 g

**Installation:** DIN-Rail mounting, wall mounting (with optional kit)

### Alarms

**Video Motion Detection:** Includes sensitivity tuning (Pending)

**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

**Custom Alarms:** HTTP event servers and CGI events for setting customized alarm 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, Yokogawa (Fieldeye series), Cohu 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: -34 to 74°C (-29 to 165°F)

**Storage Temperature:** -40 to 85°C (-40 to 185°F)

**Ambient Relative Humidity:** 5 to 95% (non-condensing)

**Regulatory Approvals**

**Safety:** UL508 (Pending)

**EMS:**

EN61000-4-2 (ESD), level 3

EN61000-4-3 (RS), level 3

EN61000-4-4 (EFT), level 3

EN61000-4-5 (Surge), level 3

EN61000-4-6 (CS), level 2

EN61000-4-8

EN61000-4-11

**EMI:** FCC Part 15, CISPR (EN55022) class A

**Traffic Control:** Complies with NEMA TS2-Section 2 (Pending)

**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.*

**Warranty**

**Warranty Period:** 5 years

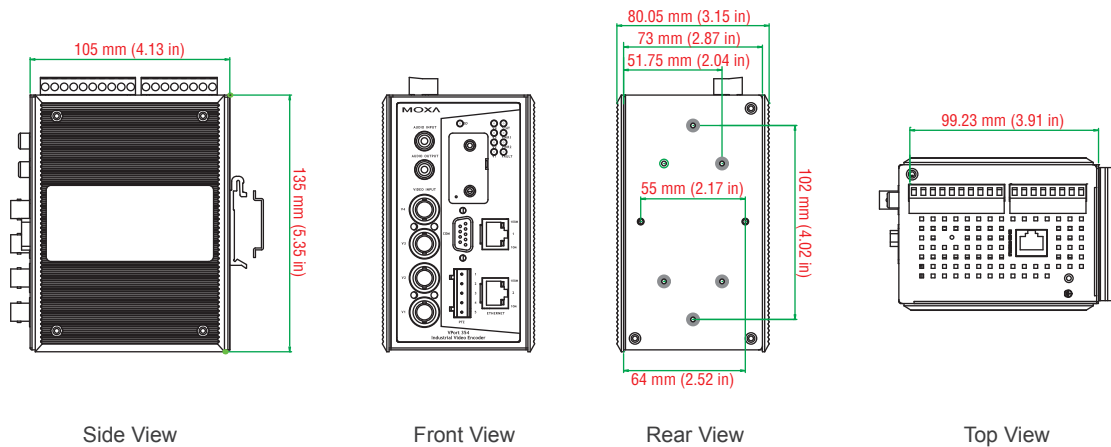
**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

**Software Bundled Free**

**SoftDVR™ Lite:** 1 to 4-ch IP surveillance software for viewing and recording

**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**



**Ordering Information**

Available Models		Port Interface		
Standard Temperature (0 to 60°C)	Wide Temperature (-34 to 74°C)	10/100BaseT(X)	Multi-mode, SC Connector	Single-mode, SC Connector
VPort 354	VPort 354-T	2	-	-
VPort 354-MM-SC	-	-	2	-
VPort 354-SS-SC	-	-	-	2

**Optional Accessories** (can be purchased separately)

**SoftNVR-IA:** 32-channel IP surveillance software for industrial automation applications

**SoftNVR:** Expandable IP surveillance software for managing up to 64 video channels

**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