

# VPort 461 Series

**Excellent video performance, 1-channel H.264/MJPEG industrial video encoders**



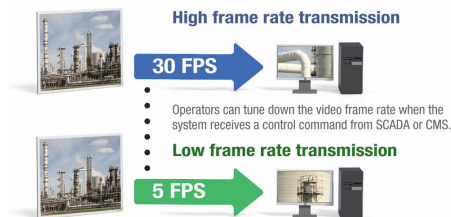
- > 3 simultaneous video streams for H.264 and MJPEG
- > Video latency under 200 ms
- > 2 Ethernet ports for cascade and Ethernet port redundancy
- > Moxa DynaStream™ function supported for network efficiency
- > ONVIF supported for standardization and interoperability
- > Local storage capability with SD card slot
- > Industrial design with -40 to 75°C operating temperature
- > Free VPort SDK PLUS supported



## Introduction

The VPort 461 1-channel industrial video encoder with H.264 video compression algorithm provides the best video quality on the market, but with a smaller bandwidth requirement than other video compression standards. In addition, to meet various video stream requirements, the VPort 461 can provide up to 3 video streams simultaneously using H.264 and MJPEG compression formats. Video streams can be used for different purposes, such as viewing, recording, and analyzing. In addition, the industrial rugged design, which includes a -40 to 75°C operating temperature, IP30 protection, and industrial certifications, make the VPort 461 suitable for harsh environments.

The VPort 461 is equipped with Moxa's innovative DynaStream™ technology to reduce bandwidth consumption of your video transmissions when the network is over-loaded by automatically decreasing the video frame rate. DynaStream™ can also increase video FPS when emergencies occur, offering total control of bandwidth-usage to network administrators.



## Specifications

### Video

- Video Compression:** H.264 (MPEG4 part 10), MJPEG
- Video Inputs:** 1 (BNC connector)
- Video Outputs:** over Ethernet
- Video Streams:** Max. of 3 video streams (2 encoders: 1 for H.264, 1 for H.264 or MJPEG)
- 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
VGA	640 x 480	30	640 x 480	25
4CIF	704 x 480	30	704 x 576	25
Full D1	720 x 480	30	720 x 576	25

### Video Viewing:

- DynaStream™ supported for changing the video frame rate automatically
- Adjustable image size and quality
- Timestamp and text overlay
- Maximum of 10 simultaneous unicast connections

### Audio

- Audio Inputs:** 1 Line-in or MIC-in with 3.5 mm phone jack
- Audio Outputs:** 1 Line-out with 3.5 mm phone jack
- Audio Format:** Mono, PCM

### Network

- Protocols:** TCP, UDP, HTTP, SMTP, FTP, NTP, DNS, DHCP, UPnP, RTP, RTSP, ICMP, IGMPv3, QoS, SNMPv1/v2c/v3, DDNS, Modbus/TCP
- Ethernet:** 2 10/100BaseT(X) auto negotiating RJ45 ports

### 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:** 2, 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
- VIDEO:** Video input signal
- PTZ:** PTZ control signal
- SD:** SD card operation

### Local Storage

- SD Socket:** Standard SD socket, V2.0 (SDHC)

### Power Requirements

- Input Voltage:** 2 24 VDC/VAC power inputs for redundancy
- Power Consumption:** Approx. 5.5 W

### Physical Characteristics

- Housing:** Metal, IP30 protection
- Dimensions:** 52.98 x 135 x 105 mm (2.09 x 5.31 x 4.13 in)
- Weight:** 900 g
- Installation:** DIN-Rail mounting, wall mounting (with optional kit)

## Alarms

**Video Motion Detection:** Includes sensitivity tuning

**Video Loss:** Video loss alarm

**Scheduling:** Daily repeat timing schedule

**Imaging:** JPEG snapshots for pre/trigger/post alarm images

**Custom Alarms:** HTTP event servers and CGI events for setting customized alarm actions

**Email/FTP Messaging:** Automatic transfer of stored images via email or FTP with event-triggered actions

**Pre-alarm Buffer:** 24 MB for JPEG snapshot images

## 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 24 custom commands

**PTZ Function Updates:** Driver upload supported

**Supported Device Protocols:** Pelco D, Pelco P, Dynacolor DynaDome, 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: -40 to 75°C (-40 to 167°F)

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

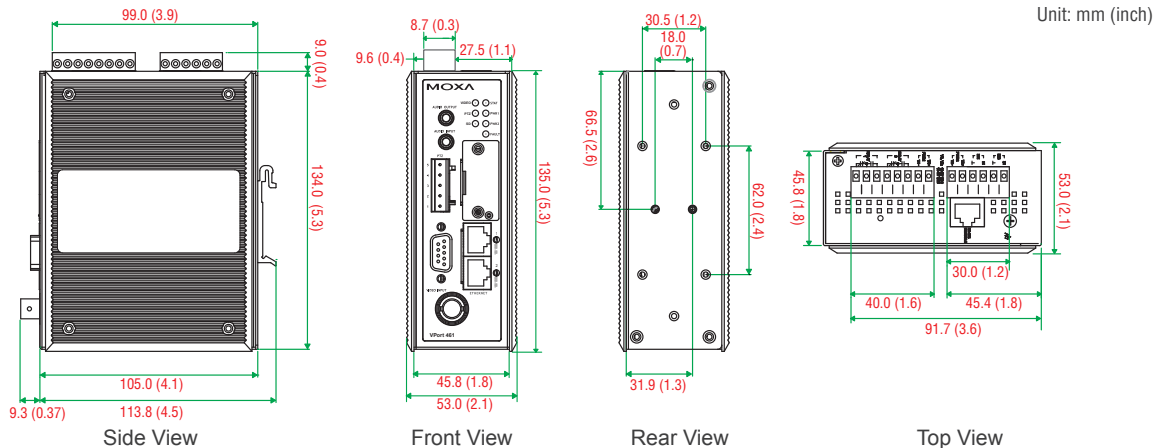
**Ambient Relative Humidity:** 5 to 95% (non-condensing)

## Standards and Certifications

**Safety:** UL 60950-1

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

## Dimensions



## Ordering Information

### Available Models

**VPort 461:** 1-channel H.264/MJPEG industrial video encoder with 2 10/100BaseT(X) ports, 0 to 60°C operating temperature

**VPort 461-T:** 1-channel H.264/MJPEG industrial video encoder with 2 10/100BaseT(X) ports, -40 to 75°C operating temperature

**VPort 461-ON:** 1-channel H.264/MJPEG industrial video encoder with 2 10/100BaseT(X) ports, 0 to 60°C operating temperature, ONVIF verison firmware

**VPort 461-ON-T:** 1-channel H.264/MJPEG industrial video encoder with 2 10/100BaseT(X) ports, -40 to 75°C operating temperature, ONVIF version firmware

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

**SoftNVR-IA:** 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 461 video encoder
- 6-pin terminal block for 1 power input and 2 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