

VPort 461 Series

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



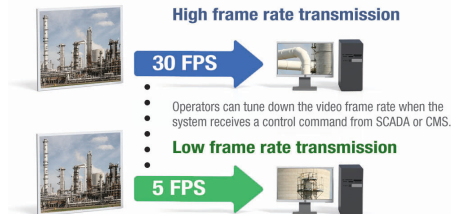
- > 3 simultaneous video streams for H.264 and MJPEG
- > Video latency under 200 ms
- > 2 Ethernet ports for cascade and Ethernet port redundancy
- > Moxa DynaStream™ function supported for network efficiency
- > ONVIF supported for standardization and interoperability
- > Local storage capability with 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
- Low: +13 to +30 V; High: -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:** 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

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

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)

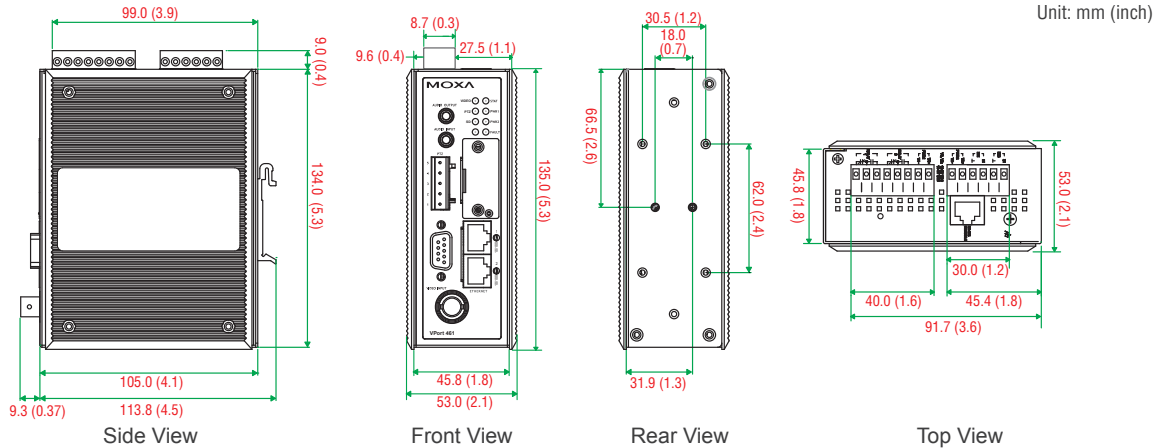
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 60950-1

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

Dimensions



EMS:

EN 61000-4-2 (ESD), Level 3,

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

Traffic Control: NEMA TS2

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: 375,000 hours

Database: Telcordia (Bellcore), GB 25°C

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 SP4 or above, Windows Vista, Windows 7

Browser: Internet Explorer 9.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 available for download from Moxa's website).

Standard: ONVIF

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