VPort 461 Series
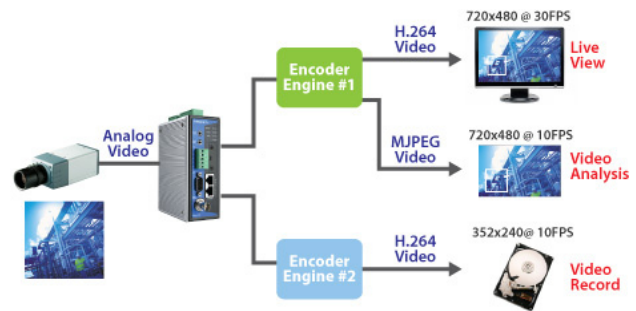
High resolution, 1-channel H.264 industrial video encoder

> Three simultaneous video streams for H.264 and MJPEG
> Video stream up to 30/25 frames/sec at full D1 (NTSC:720 x 480; PAL:720x576) resolution
> Video latency under 200 ms
> 2 Ethernet ports for cascade and Ethernet port redundancy
> Local storage capability with SD card slot
> Industrial design with -40 to 75°C operating temperature
> Free VPort SDK PLUS supported

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: Introduction

The VPort 461 is a 1-channel industrial video encoder with H.264 video compression algorithm and can provide 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 with H.264 and MJPEG compression format. Video streams can be used for different purposes, such as viewing, recording, and analyzing. In addition, the industrial-rugged design, which include a -40 to 75°C operating temperature, IP30 form factor protection, and industrial certifications, make the VPort 461 suitable for harsh environments.

: Specifications

Video
Video Compression: H.264 (MPEG4 part 10, AVC), 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 and 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:
• Adjustable image size and quality
• Timestamp and text overlay

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

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

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: 2, max. 8 mA
• High: +13 to +30V; • Low: -30 to +3V
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, video loss, 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 12 VDC or 24 VDC/VAC power inputs for redundancy

MOXA®

Physical Characteristics

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

Alarms

Video Motion Detection: Includes sensitivity tuning (after V2.0)
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 Dyna-Dome, Yokogawa (Fieldeye), 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)

Regulatory Approvals

Safety: UL508 (Pending)
EMS:
EN61000-4-2 (ESD), level 2
EN61000-4-3 (RS), level 3
EN61000-4-4 (EFT), level 3
EN61000-4-5 (Surge), level 3
EN61000-4-6 (CS), level 3
EN61000-4-8
EN61000-4-11
EMI: FCC Part 15, CISPR (EN55022) class A
Hazardous Location: UL/cUL Class I, Division 2, Groups A, B, C, D (Pending); ATEX Class I, Zone 2, Ex nC IIC (Pending)
Traffic Control: Complies with NEMA TS2-Section 2
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

System Requirements

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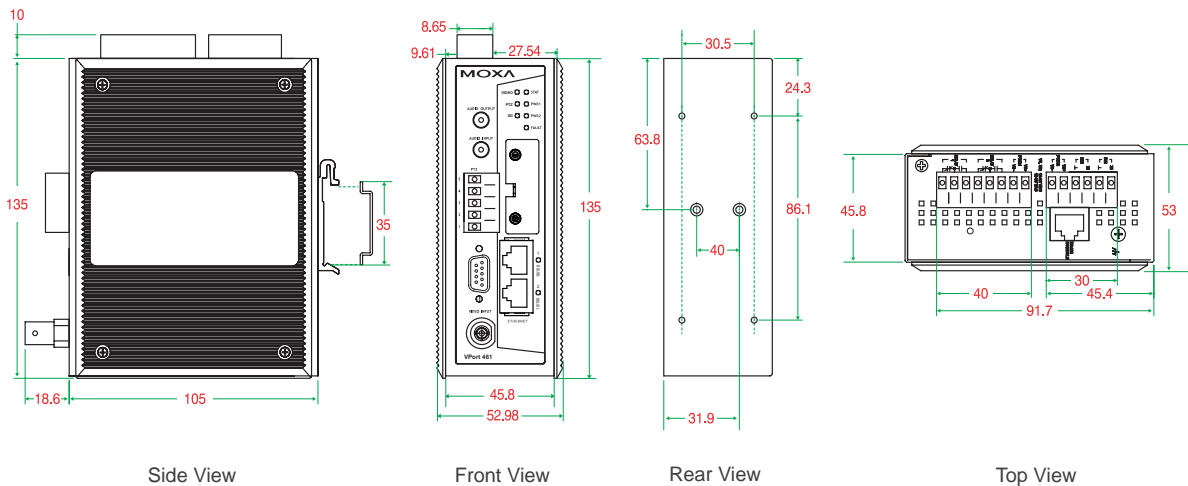**OS:** Windows XP/2000 with SP2 or above
Browser: Internet Explorer 6.x or above
Multimedia: DirectX 9.0c or above

Software Bundled Free

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)

Side View   Front View   Rear View   Top View

Ordering Information

Available Models

VPort 461: 1-channel H.264 industrial video encoder with 2 10/100BaseT(X) ports, 0 to 60°C operating temperature
VPort 461-T: 1-channel H.264 industrial video encoder with 2 10/100BaseT(X) ports, -40 to 75°C operating temperature

Optional Accessories (can be purchased separately)

SoftNVR-IA: 32-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