VPort 464 Series

Superior video performance, 4-channel industrial video encoders



Features and Benefits

- Each channel supports 2 D1 30 fps streams simultaneously, or merge 1 quad stream 30 fps image into 4 channels
- Video latency under 200 ms
- 2 Ethernet ports for cascading or Ethernet port redundancy
- DynaStream™ for optimized network efficiency
- ONVIF support for standardization and interoperability
- Local storage capability with microSD card slot
- Industrial design with -40 to 75°C operating temperature

Certifications

Introduction

The VPort 464 4-channel industrial video encoder uses the H.264 video compression algorithm to provide the best video quality on the market, but with a smaller bandwidth requirement than other video compression standards. In addition, to meet various requirements, each channel of the VPort 464 can support 2 video streams simultaneously or you can merge all 4 channels into 1 quad view stream using H.264 and MJPEG compression formats, providing greater flexibility for a variety of uses, including viewing, recording, and analysis. The rugged industrial design, which includes a -40 to 75°C operating temperature, IP30 protection, and industrial certifications, make the VPort 464 suitable for harsh environments.

The VPort 464 comes with two Gigabit Ethernet ports and supports cascade mode and network redundancy. In addition, Moxa's innovative DynaStream™ technology lets you change the video frame rate automatically, allowing you to control your network bandwidth budget and simplify network system management. The CBR Pro™ function guarantees the lowest packet loss for limited bandwidth transmissions to ensure that images will not exhibit the mosaic effect.

Specifications

Memory	
microSD Slot	SDXC
Input/Output Interface	
Digital Input Channels	4
Digital Inputs	+13 to +30 V for state 1 -30 to +1 V for state 0 Max. input current: 8 mA
Relay Channels	2
Contact Current Rating	Resistive load: 1 A @ 24 VDC
Connector	Terminal block
Ethernet Interface	
10/100BaseT(X) Ports (RJ45 connector)	2

Ethernet Software Features

Protocols	TCP/IP, IPv4/IPv6, UDP, HTTP, RTP/RTSP, ARP, UPnP, FTP, TFTP, SMTP, NTP Client, DNS, DDNS, QoS, IGMP v3, ICMP, SNMPv1/v2c/v3, Modbus TCP, HTTPS, 802.1X, NTCIP

Security Functions

Password	User-level password protection
Filter	IP address
Authentication	802.1X
Encryption	HTTPS

LED Interface

LED Indicators	STAT: Indicates if system is booted up properly or not Power 1: Power 1 on/off Power 2: Power 2 on/off FAULT: Can be configured to correspond to system alarm, power failure, or disconnected network Video: Video input signal PTZ: Indicates if PTZ or COM port data has been transmitted SD: Indicates if SD card was mounted successfully Network: 10 Mbps or 100 Mbps

Serial Interface

PTZ Port	1, RS-232 or RS-422/485 port, terminal block connector, 115.2 kbps
COM Port	1, RS-232 or RS-485 port, DB9 male connector, 115.2 kbps
Console Port	1 RS-232 port, 10-pin RJ45 (115200, n, 8, 1)

Power Parameters

No. of Power Inputs	2
Input Voltage	Redundant dual inputs
Operating Voltage	12 to 32 VDC, 18 to 30 VAC
Input Current	0.5 A @ 24 VDC 0.83 A @ 24 VAC
Power Connector	2-pin terminal block

Video Interface

Video Compression	H.264 (ISO/IEC 14496-10) or MJPEG
Video Input	4, BNC connector (1.0 Vpp, 75 ohm)
Video Output	via Ethernet
Video Streams	2 independent H.264 or MJPEG video streams 1 quad (4-channel images) stream
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
4CIF	704 x 480	30	704 x 576	25
CIF	352 x 240	30	352 x 288	25
VGA	640 x 480	30	640 x 480	25
QVGA	320 x 240	30	320 x 240	25
Full D1	720 x 480	30	720 x 576	25
Quad View	1440 x 960	30	1440 x 1152	25

Video Viewing	DynaStream™ support for changing the video frame rate automatically CBR Pro™ for good image quality in limited bandwidth transmissions Adjustable image size and quality Timestamp and text overlay OSD (On Screen Display) position adjustable Maximum of 5 simultaneous unicast connections, 50 multicast clients Image tuning control: brightness, contrast, saturation, sharpness, noise reduction

Audio Interface

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 (G.711)

Camera Software Development

VPort SDK PLUS	Includes CGI commands, ActiveX Control, and API library for customized applications or system integration for third-party developers
Video Standards	ONVIF Profile S

Camera PAN/TILT/ZOOM

PTZ Camera Control	Via PTZ port or COM port
PTZ Control Functions	Pan, tilt, zoom, focus, move speed, preset position (max. 128 positions)
PTZ Function Updates	Driver upload supported
Protocols	Pelco D, Pelco P, Custom Camera

Camera Alarm Software Features

Intelligent Video	Camera tampering detection
Video Motion Detection	3 independently configurable areas
Scheduling	Daily repeat timing schedule
Imaging	JPEG snapshots for pre/trigger/post alarm images
Custom Alarms	HTTP event servers for setting customized alarm actions
Email/FTP Messaging	Automatic transfer of stored images via email or FTP as event-triggered actions
Pre-Alarm Buffer	50 MB video buffer for JPEG snapshot images
Video Recording	Event recordings stored on the SD card

Software Requirements

Memory Size	1 GB
Operating System	Windows 7 or above
Browser	Internet Explorer 9.x or above
Multimedia	DirectX 9.0C or above

Physical Characteristics

Housing	Metal
Dimensions	80.2 x 135 x 105 mm (3.16 x 5.31 x 4.13 in)
Weight	1130 g (2.49 lb)
Installation	DIN-rail mounting, Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	Standard Models: -25 to 60°C (-13 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Altitude	2000 m

Standards and Certifications

EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Freefall	IEC 60068-2-31
Safety	UL 60950-1
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6

MTBF

Time	569,152 hrs
Standards	Telcordia SR332

Warranty

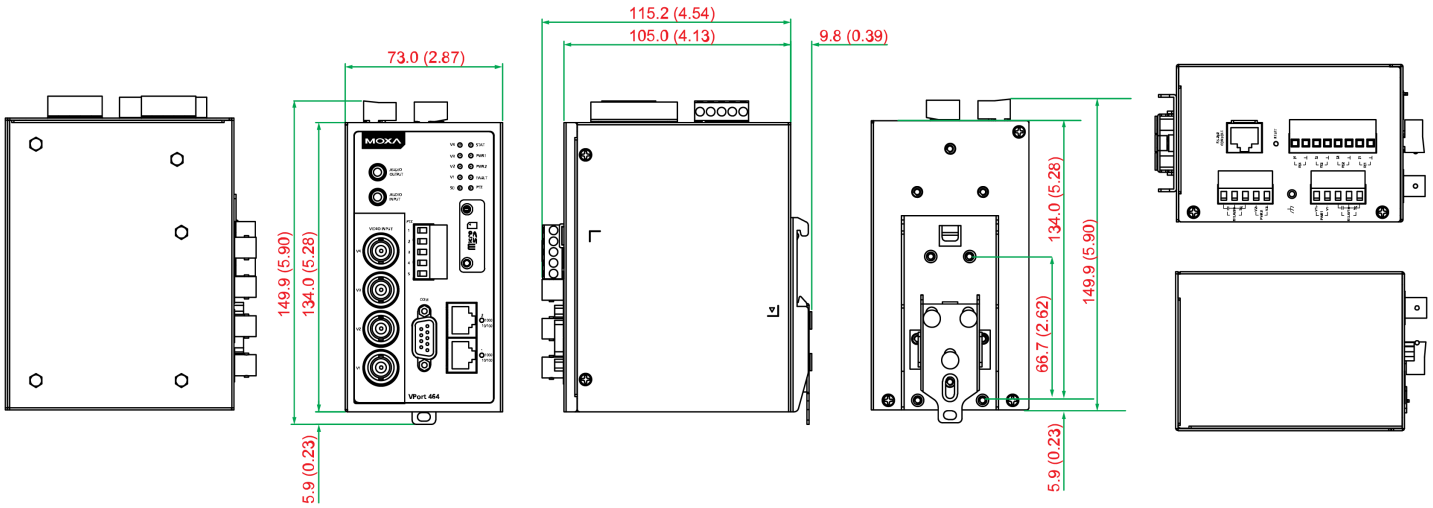
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x VPort 464 Series video encoder
Installation Kit	2 x terminal block, 5-pin 1 x terminal block, 8-pin 1 x terminal block, 5-pin
Documentation	1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Video Interface	Audio Interface	Local Storage	Power Input	Operating Temp.	Mounting
VPort 464	4-channel analog video input	1 x line-in, 1 x line-out	microSD slot, SDXC interface	Redundant power inputs with 2 x 12/24 VDC, 24 VAC power supplies	-25 to 60°C	DIN-rail mount or Panel mount (with optional kit)
VPort 464-T	4-channel analog video input	1 x line-in, 1 x line-out	microSD slot, SDXC interface	Redundant power inputs with 2 x 12/24 VDC, 24 VAC power supplies	-40 to 75°C	DIN-rail mount or Panel mount (with optional kit)

Accessories (sold separately)

Power Supplies

DR-120-24	120W/2.5A DIN-rail 24 VDC power supply with universal 88 to 132 VAC or 176 to 264 VAC input by switch, or 248 to 370 VDC input, -10 to 60°C operating temperature
DR-4524	45W/2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 50° C operating temperature
DR-75-24	75W/3.2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 60°C operating temperature
MDR-40-24	DIN-rail 24 VDC power supply with 40W/1.7A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature
MDR-60-24	DIN-rail 24 VDC power supply with 60W/2.5A, 85 to 264 VAC, or 120 to 370 VDC input, -20 to 70°C operating temperature

Wall-Mounting Kits

WK-46-01	Wall-mounting kit, 2 plates, 8 screws, 46 x 66.8 x 2 mm

Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit

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