

# VPort 464シリーズ

## 優れたビデオ性能、4チャンネル産業用ビデオエンコーダ



### 機能とメリット

- 各チャンネルは2つのD1 30 fpsストリームを同時にサポート、または4つのチャンネルを1つのクアドストリーム30 fps画像にマージ
- 200ミリ秒以下のビデオレイテンシ
- 2つのイーサネットポートによりカスケード接続またはイーサネットポートの冗長構成に対応
- DynaStream™により最適化されたネットワーク効率を実現
- 標準および相互運用性のためのONVIFサポート
- microSDカードスロットによるローカルストレージ機能
- 動作温度-40~75°Cの産業用設計

### 認証



### 製品紹介

VPort 464 4チャンネル産業用ビデオエンコーダはH.264ビデオ圧縮アルゴリズムを使用しています。このアルゴリズムにより、市場最高のビデオ画質をその他のビデオ圧縮規格と比較しても小さな帯域幅で提供することが可能になります。さらに、さまざまな要件を満たすために、VPort 464の各チャンネルは2つのビデオストリームを同時にサポートできます。または、H.264およびMJPEG圧縮形式を使用して、4つのチャンネルすべてを1つのクアドビューストリームにマージします。これにより、表示、録画、分析を含む、さまざまな用途により柔軟に対応できます。VPort 464は-40~75°Cの動作温度、IP30保護等級、および産業用規格などに対応した産業用途向けの堅牢な設計がなされており、過酷な環境下での使用に適しています。

VPort 464には2つのギガビットイーサネットポートが付属しており、カスケードモードとネットワーク冗長性をサポートしています。さらに、Moxaの革新的なDynaStream™技術により、ビデオフレームレートを自動的に変更できるため、ネットワーク使用帯域を制御し、ネットワークシステム管理を簡素化できます。CBR Pro™機能は、限られた帯域幅の送信で最小の packets 損失を保証し、画像がモザイク効果を示さないようにします。

### 仕様

#### Memory

|              |      |
|--------------|------|
| microSD Slot | SDXC |
|--------------|------|

#### Input/Output Interface

|                        |   |
|------------------------|---|
| Digital Input Channels | 4   |
| Digital Inputs         | +13 to +30 V for state 1<br>-30 to +1 V for state 0<br>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<br>Power 1: Power 1 on/off<br>Power 2: Power 2 on/off<br>FAULT: Can be configured to correspond to system alarm, power failure, or disconnected network<br>Video: Video input signal<br>PTZ: Indicates if PTZ or COM port data has been transmitted<br>SD: Indicates if SD card was mounted successfully<br>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<br>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<br>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 | <p>DynaStream™ support for changing the video frame rate automatically</p> <p>CBR Pro™ for good image quality in limited bandwidth transmissions</p> <p>Adjustable image size and quality</p> <p>Timestamp and text overlay</p> <p>OSD (On Screen Display) position adjustable</p> <p>Maximum of 5 simultaneous unicast connections, 50 multicast clients</p> <p>Image tuning control: brightness, contrast, saturation, sharpness, noise reduction</p> |
|---------------|---|

| 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)<br>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<br>IEC 61000-4-3 RS: 80 MHz to 1 GHz: 20 V/m<br>IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV<br>IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV<br>IEC 61000-4-6 CS: 10 V<br>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

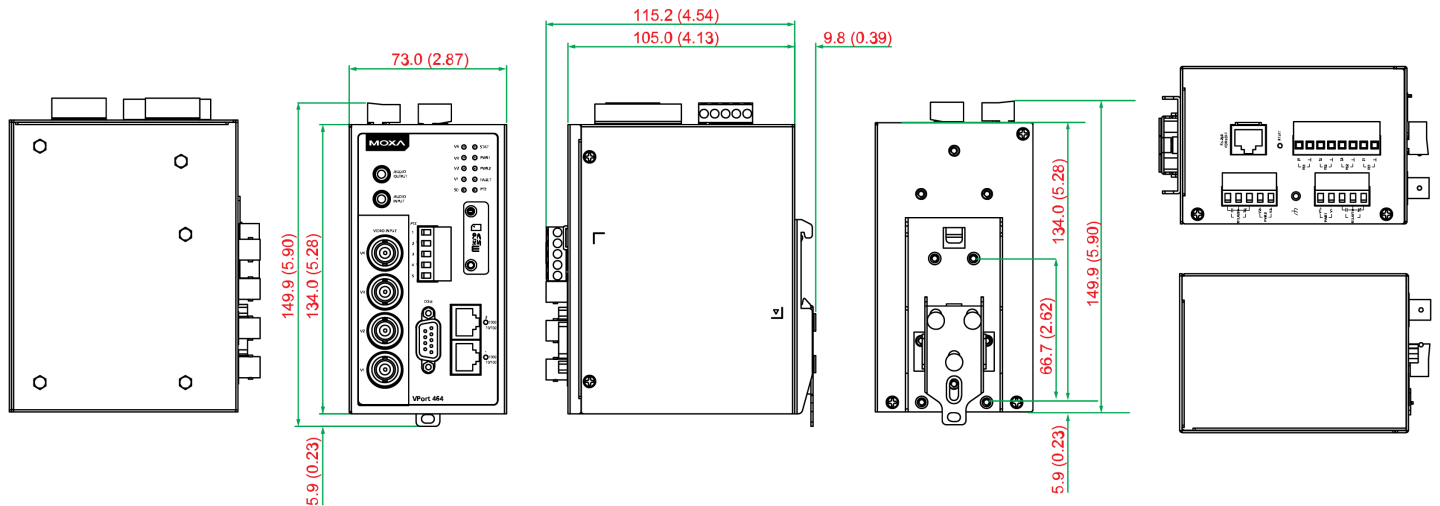
|                 |  |
|-----------------|--|
| Warranty Period | 5 years  |
| Details         | See <a href="http://www.moxa.com/jp/warranty">www.moxa.com/jp/warranty</a> |

## Package Contents

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

## 寸法

単位：mm（インチ）



## 注文情報

| 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) |

## アクセサリ（別売）

### 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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