

VPort P06HC-1V Series

EN 50155, HD, cubic IP cameras



Features and Benefits

- 1/2.7" progressive scan camera with maximum 1280 x 800 resolution at up to 30 fps
- High quality video imaging with DNR and WDR
- Up to 3 H.264 or MJPEG independent video streams
- DynaStream™ for optimized network efficiency
- CBR Pro™ for high image quality in limited bandwidth transmissions
- Supports DHCP options 66 and 67 for auto-configuration
- ONVIF support for standardization and interoperability

Certifications



Introduction

The VPort P06HC-1V Series cubic IP cameras provide an HD (720P, 1280 x 720) video image, and feature 3 H.264 video streams, giving them the versatility and ruggedness to excel in many different installations and environments for IP video surveillance applications. In addition, the cameras comply with a portion of EN 50155 specifications, covering operating temperature, power input voltage, surge, ESD, and vibration, making them suitable for a variety of industrial applications. The cameras feature a -40 to 55°C operating temperature, a rugged M12 Ethernet port, PoE power inputs, and a selectable lens.

Specifications

| | |
|--|--|
| Ethernet Interface | |
| PoE Ports (10/100BaseT(X), M12 D-coded 4-pin female connector) | 1 |
| Ethernet Software Features | |
| Protocols | TCP/IP, IPv4, UDP, HTTP, RTP/RTSP, ARP, UPnP, FTP, TFTP, SMTP, NTP Client, DNS, DDNS, QoS, IGMP v3, ICMP, SNMPv1/v2c/v3, DHCP Opt66/67, HTTPS |
| Security Functions | |
| Password | User-level password protection |
| Filter | IP address |
| Encryption | HTTPS |
| Power Parameters | |
| No. of Power Inputs | 1 |
| Source of Input Power | PoE (IEEE 802.3af) |
| Input Current | 0.17 A @ 48 VDC |
| Camera Characteristics | |
| Sensor | 1/2.7-in HD progressive scan CMOS |
| Lens | VPort P06HC-1V28M Series: f=2.8 mm, F2.0, Diagonal 126°, Horizontal 113°, Vertical 58° VPort P06HC-1V36M Series: f=3.6 mm, F1.6, Diagonal 99°, Horizontal 94°, Vertical 47° |

| | |
|-------------------------------|--|
| | VPort P06HC-1V42M Series: f=4.2 mm, F1.8, Diagonal 87°, Horizontal 80°, Vertical 43° VPort P06HC-1V60M Series: f=6.0 mm, F1.6, Diagonal 60°, Horizontal 55°, Vertical 29° VPort P06HC-1V80M Series: f=8.0 mm, F1.6, Diagonal 45°, Horizontal 40°, Vertical 22° |
| Minimum Illumination | Color: 0.2 lux, at F1.2 (Gain High, 50 IRE, 1/30 sec) |
| Synchronization | Internal |
| White Balance | ATW/AWB |
| Electronic Shutter | Auto (1/30 to 1/25000 sec) |
| S/N Ratio | Maximum 50 dB (AGC off; DNR on) |
| DNR (digital noise reduction) | Built-in DNR |
| WDR (wide dynamic range) | 110 dB |
| Flickerless Control | Automatic, 50 Hz, 60 Hz modes |
| Image Rotation | Flip, Mirror, and 180° rotation |
| Image Setting | Manual tuning with saturation, sharpness, and contrast |
| AGC (auto gain control) | 2X, 4X, 8X, 16X, 32X, 64X |
| BLC (back light compensation) | High/Medium/Low |

Video Interface

| | |
|-------------------|--|
| Video Compression | H.264 (ISO/IEC 14496-10) or MJPEG |
| Video Output | via Ethernet |
| Video Streams | 3 independent H.264 or MJPEG video streams |

Video Resolution and FPS (frames per second)

| | NTSC | | PAL | |
|---------|------------|----------|------------|----------|
| | Size | Max. FPS | Size | Max. FPS |
| QCIF | 176 x 112 | 30 | 176 x 144 | 25 |
| QVGA | 320 x 240 | 30 | 320 x 240 | 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 |
| SVGA | 800 x 600 | 30 | 800 x 600 | 25 |
| HD | 1280 x 720 | 30 | 1280 x 720 | 25 |
| WXGA | 1280 x 800 | 30 | 1280 x 800 | 25 |

Note: Multiple streams may not support up to 30 FPS.

Video Viewing

DynaStream™ support for changing the video frame rate automatically
CBR Pro™ for good image quality in limited bandwidth transmissions
3 privacy mask areas provided
Adjustable image size and quality
Timestamp and text overlay
OSD (On Screen Display) position adjustable
Maximum of 5 simultaneous unicast connections, 50 multicast clients

Camera Software Development

| | |
|-----------------|-----------------|
| Video Standards | ONVIF Profile S |
|-----------------|-----------------|

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 |
| FTP Messaging | Automatic transfer of stored images via FTP as event-triggered actions |

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 | 60 x 60 x 74.6 mm (2.36 x 2.36 x 2.94 in) |
| Weight | 300 g (0.66 lb) |
| Installation | Flush mounting |
| Protection | -CT models: PCB conformal coating |

Environmental Limits

| | |
|--|---|
| Operating Temperature | -40 to 55°C (-40 to 131°F) |
| Storage Temperature (package included) | -40 to 85°C (-40 to 185°F) |
| Ambient Relative Humidity | 5 to 95% (non-condensing) |
| Ingress Protection | IEC 60529, IP30 (provided screws are used to fill the camera housing screw holes) |
| 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: Signal: 2 kV IEC 61000-4-5 Surge: Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF |
| Freefall | IEC 60068-2-31 |
| Railway Fire Protection | EN 45545-2 |
| Safety | UL 62368-1 |
| Shock | IEC 60068-2-27, IEC 61373, EN 50155 |
| Vibration | IEC 60068-2-64, IEC 61373, EN 50155 |
| Railway | EN 50155 (complies with a portion of EN 50155 specifications) |

MTBF

| | |
|-----------|-------------|
| Time | 692,847 hrs |
| Standards | IEC 62380 |

Warranty

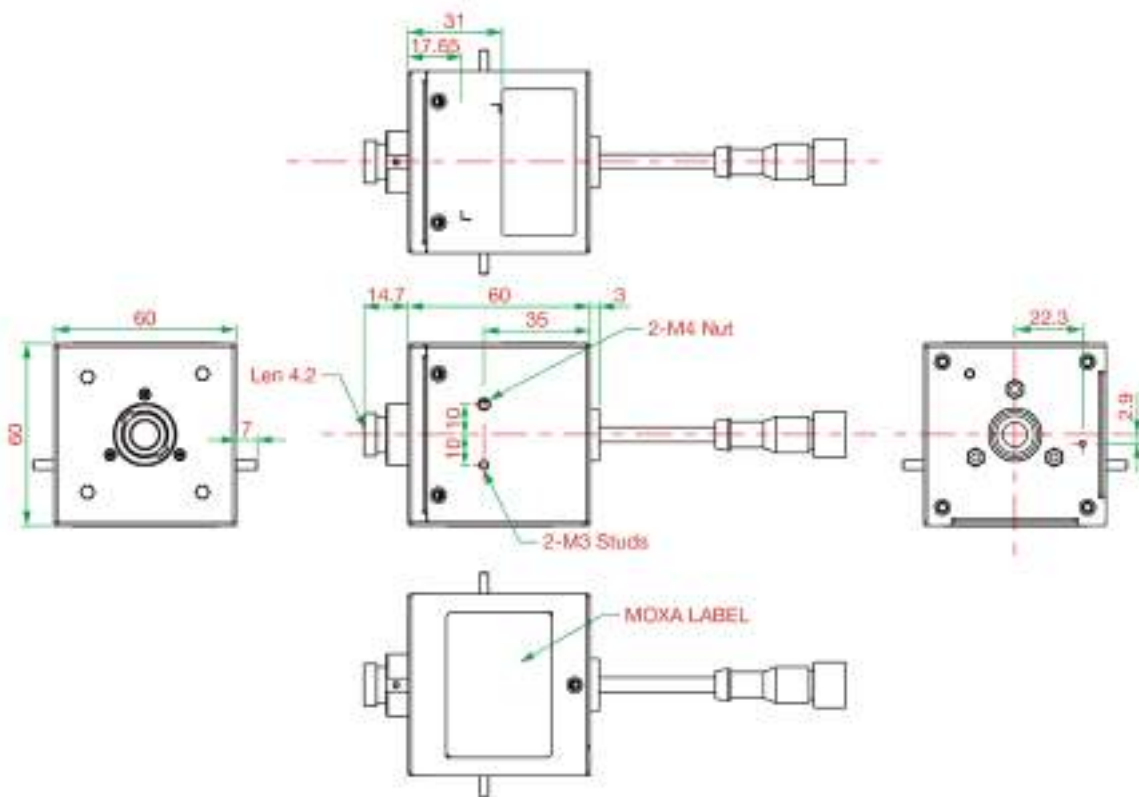
| | |
|-----------------|--|
| Warranty Period | 5 years |
| Details | See www.moxa.com/warranty |

Package Contents

| | |
|---------------|---|
| Device | 1 x VPort P06HC-1V Series camera |
| Documentation | 1 x quick installation guide 1 x warranty card |

Dimensions

Unit: mm



Ordering Information

| Model name | Lens | Conformal coating |
|----------------------|--------|-------------------|
| VPort P06HC-1V28M | 2.8 mm | - |
| VPort P06HC-1V36M | 3.6 mm | - |
| VPort P06HC-1V42M | 4.2 mm | - |
| VPort P06HC-1V60M | 6.0 mm | - |
| VPort P06HC-1V80M | 8.0 mm | - |
| VPort P06HC-1V28M-CT | 2.8 mm | ✓ |
| VPort P06HC-1V36M-CT | 3.6 mm | ✓ |
| VPort P06HC-1V42M-CT | 4.2 mm | ✓ |

| Model name | Lens | Conformal coating |
|----------------------|--------|-------------------|
| VPort P06HC-1V60M-CT | 6.0 mm | ✓ |
| VPort P06HC-1V80M-CT | 8.0 mm | ✓ |

Accessories (sold separately)

Camera Mounting Kits

| | |
|---------|---|
| VP-SCO1 | Side-cable-out adaptor for mounting the VPort P06-1MP-M12 |
|---------|---|

© Moxa Inc. All rights reserved. Updated Oct 18, 2021.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.