

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

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|-------------------|-----------------------------------|
| 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

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

Warranty

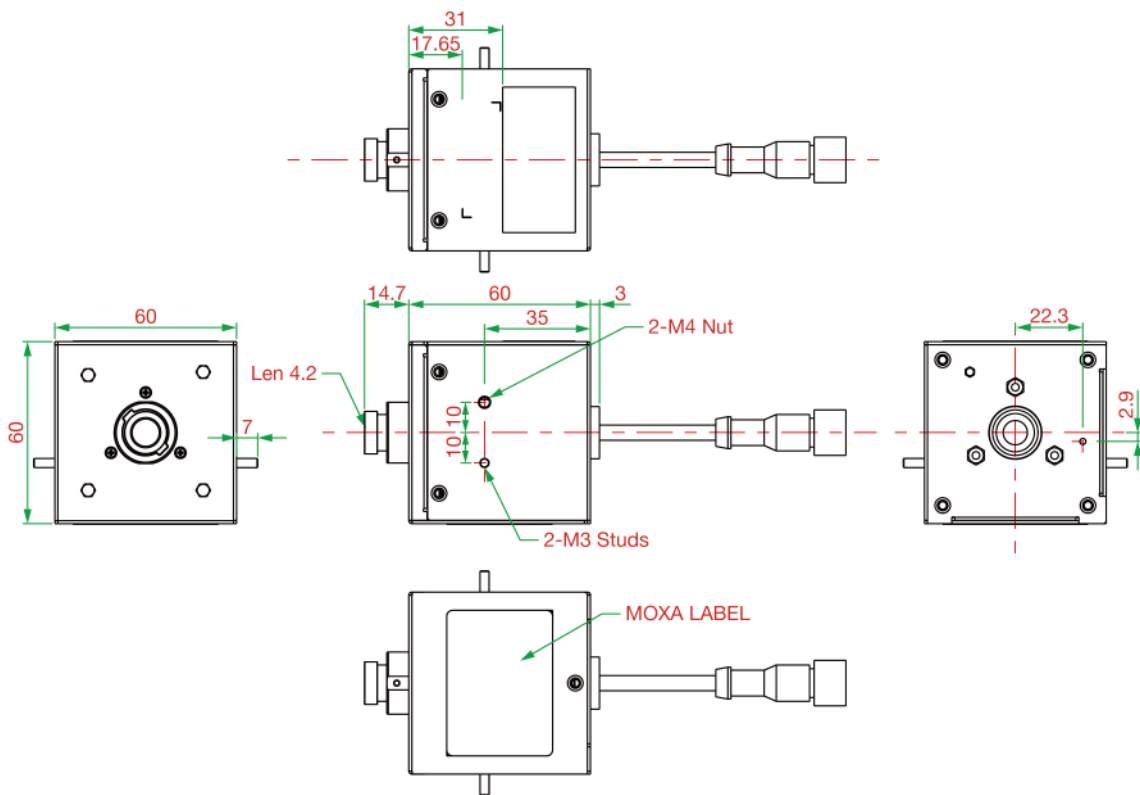
| | |
|-----------------|--|
| Warranty Period | 5 years |
| Details | See www.moxa.com/warranty |

Package Contents

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|---------------|---|
| 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 |
|---------|---|

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