

VPort P06HC-1MP-M12 Series

HD video image, square-type IP cameras for mobile surveillance



- > Complies with all EN 50155 mandatory test items*
- > -25 to 55°C operating temperature
- > 1/2.7" progressive scan camera with maximum 1280 x 800 resolution at up to 30 frames/second
- > Flush mounting for hiding inside a panel, such as a wall or ceiling
- > Up to 3 H.264 or MJPEG independent video streams
- > DynaStream™ support for maximized network efficiency
- > CBR Pro™ support for high image quality in limited bandwidth transmissions
- > Supports DHCP Opt 66/67 for auto-configuration
- > 1 built-in microphone for audio input, and 1 digital input for external sensor
- > ONVIF support for standardization and interoperability

*This product is suitable for rolling stock railway applications, as defined by the EN 50155 standard. For a more detailed statement, click here: www.moxa.com/doc/specs/EN_50155_Compliance.pdf



Introduction

The VPort P06HC-1MP-M12 square-type IP cameras provide an HD (720P, 1280 x 720) video image, and feature 3 H.264/MJPEG 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 -25 to 55°C operating temperature, a rugged M12 Ethernet port, 1 built-in microphone, 1 digital input, PoE power inputs, IP66 rain and dust protection, and a selectable lens.

Specifications

Camera

- Sensor:** 1/2.7" HD progressive scan CMOS
- Lens:** 3.6 mm megapixel fixed focal length lens
- Angle of View:**
 - 3.6 mm, F1.6: Diagonal 120°, Horizontal 96°, Vertical 56°
- Minimum Illumination:** 0.2 Lux @ F=1.2
- Synchronization:** Internal
- White Balance:** ATW/AWB
- Electronic Shutter:** Auto (1/30 to 1/25000 sec)
- S/N Ratio:** 50 dB (Gamma, Aperture, AGC, OFF; DNR ON)
- DNR:** Built-in DNR
- WDR:** Level 1-3, up to 115 dB
- AGC (auto gain control):** 2X, 4X, 8X, 16X
- Flickerless Control:** Automatic/50 Hz/60 Hz mode
- Auto Exposure:** Level ±5
- Image Rotation:** Flip, Mirror, and 180° rotation
- Image Setting:** Manual tuning with brightness and contrast

Video

- Video Compression:** H.264 (ISO/IEC 14496-10) or MJPEG
 - Video Output:** via Ethernet
 - Video Streams:** 3 independent H.264 or MJPEG video streams
 - Stream 1: H.264, 1280 x 800 resolution (max.)
 - Stream 2: H.264, 720 x 576 resolution (max.)
 - Stream 3: MJPEG, 720 x 576 resolution (max.)
- Note:** Streams 2 and 3 must be set to the same resolution

Video Resolution and FPS (frames per second):

	NTSC		PAL	
	Size	Max. FPS	Size	Max. FPS
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

Video Viewing:

- DynaStream™ support for automatic frame rate adjustment
- CBR Pro™ for good image quality in limited bandwidth transmission
- 3 privacy mask areas configurable
- Adjustable image size and quality
- Timestamp and text overlay
- OSD (On screen Display) position adjustable
- Maximum of 5 simultaneous unicast connections
- Digital PTZ with 4x zoom

Audio

- Audio Inputs:** 1, built-in microphone
- Audio Format:** Mono, PCM (G.711)

Network

Protocols: TCP/IP, UDP, HTTP, SMTP, NTP, DNS, DHCP, UPnP, RTP, RTSP, ICMP, QoS, IGMPv3, SNMPv1/v2c/v3, DDNS, TFTP, ARP, DHCP, OPT66/67

Ethernet: 1 10/100BaseT(X) isolated Ethernet port, 4-pin M12 D-coded female connector

GPIO

Digital Inputs: 1, max. 8 mA, isolated 5-pin M12 connector
High: +13 V to +30 V; Low: -30 V to +3 V

Power Requirements

Input: Power-over-Ethernet (IEEE 802.3af)

Power Consumption: 6 W (max.)

Physical Characteristics

Housing: IP66 metal housing with transparent cover

Dimensions: 109 x 68 x 90 mm (4.29 x 2.68 x 3.54 in)

Weight: 903 g (1.1 lb)

Installation: Flush mounting

Alarms

Intelligent Video: Camera tamper

Video Motion Detection: 3 independently configurable motion 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: 12 MB video buffer for JPEG snapshot images

Security

Password: User level password protection

Filtering: By IP address

Encryption: HTTPS, SSH

Environmental Limits

Operating Temperature: -25 to 55°C (-13 to 131°F)

Storage Temperature: -40 to 75°C (-40 to 167°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Altitude: 2000 m

Conformal Coating: Available on request

Standards and Certifications

Safety: UL 60950-1

Rail Traffic: EN 50155*, EN 45545-2

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EMI: FCC Part 15, CISPR (EN 55032) 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: 2 kV

IEC 61000-4-6 CS: 10 V

IEC 61000-4-8

Shock: IEC 61373

Freefall: IEC 60068-2-32

Vibration: IEC 61373

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

Minimum Viewing System Requirements

CPU: Pentium 4, 2.4 GHz

Memory: 512 MB of memory

OS: Windows XP/2000 with SP4 or above, Windows Vista, Windows 7

Browser: Internet Explorer 9.x or above

Multimedia: DirectX 9.0c or above

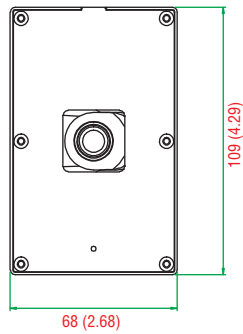
Software Development

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 available for download from Moxa's website).

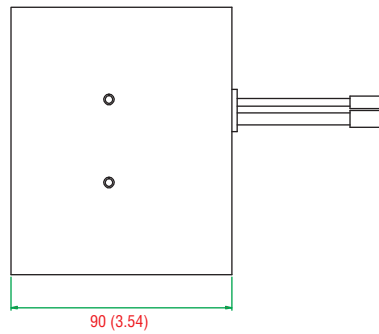
Standard: ONVIF

Dimensions

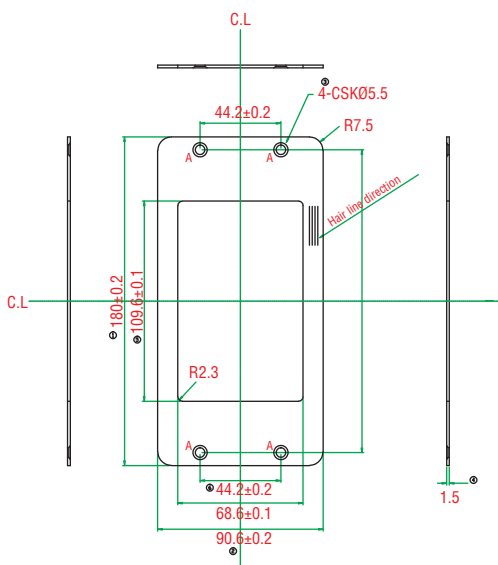
Unit: mm (inch)



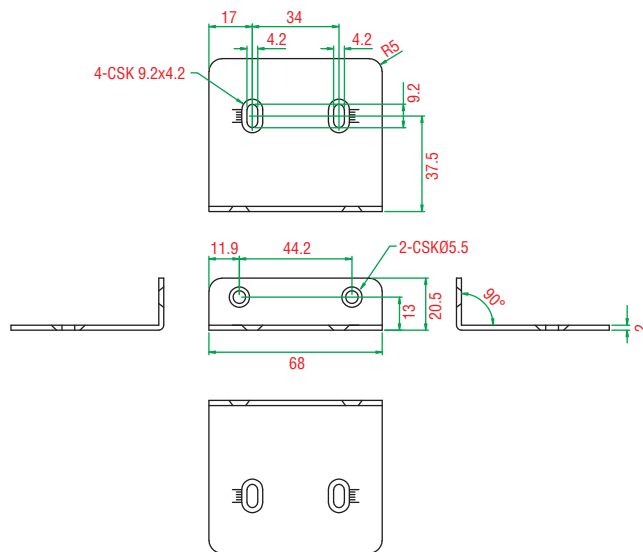
Front View



Side View



Front Decorative Plate



Wall-Mounting Kit

Ordering Information

Available Models

VPort P06HC-1MP-M12-CAM36: EN 50155 compliant, HD, H.264/MJPEG square-type IP camera, 3.6 mm lens, M12 Ethernet connector, PoE, -25 to 55°C operating temperature

Note: Conformal coating available upon request

Optional Accessories (can be purchased separately)

SoftNVR-IA: 64-channel IP surveillance software for industrial automation applications

VP-FD1: Front decorative plate for the VPort P06HC

Package Checklist

- VPort P06HC-1MP-M12 IP camera
- L-type Torx screwdriver
- Dry pack
- Hook fasteners
- 2 L-type installation kits and 4 nylock screws
- Installation stick
- Quick installation guide (printed)
- Documentation and software CD
- Warranty card