

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
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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
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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
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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

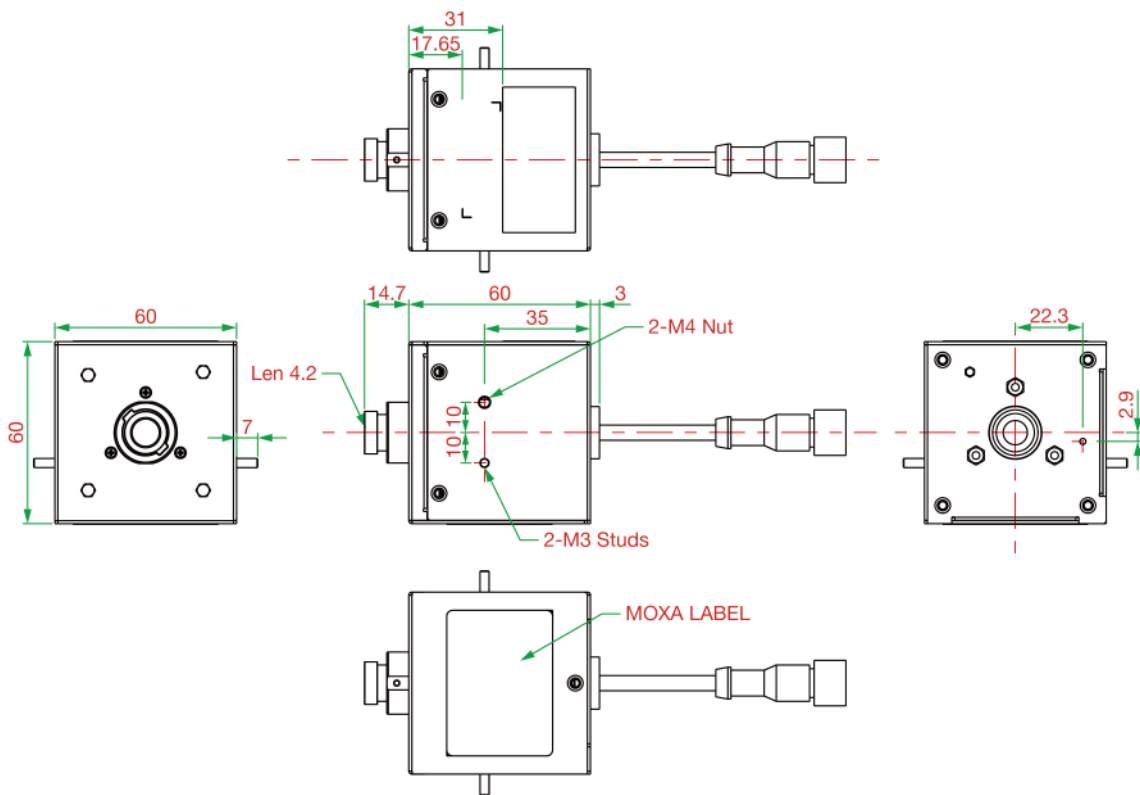
Warranty Period	5 years
Details	See www.moxa.com/warranty

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
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