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

Video Resolution and FPS (frames per second)

3 independent H.264 or MJPEG video streams

	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.

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

Video Viewing

ONVIF Profile S



Camera Alarm Software Features

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)

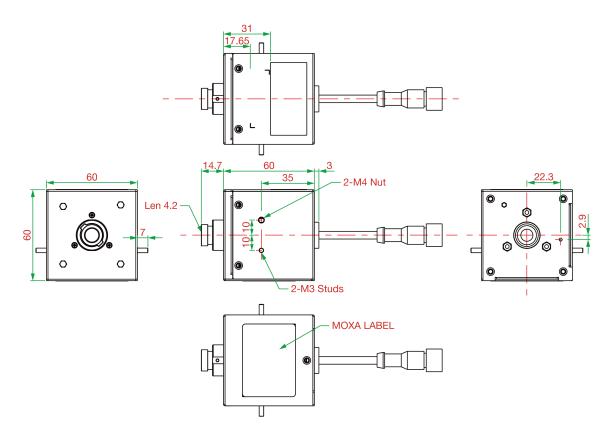


MTBF

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.

