

VPort P07-2 Series

EN 50155 1080P H.265 compact IP cameras



Features and Benefits

- 1/2.8" progressive scan camera with maximum 1920 x 1080 at up to 60 fps
- High quality video imaging with DNR and WDR
- Up to 4 simultaneous H.265/H.264 or MJPEG independent video streams
- DynaStream™ for optimized network efficiency
- CBR Pro™ for high image quality in limited bandwidth transmissions
- ONVIF conformity for standardization and interoperability

Certifications



Introduction

The VPort P07-2 cameras are compact, 2 megapixels (1920 x 1080), H.265/H.264/MJPEG dome IP cameras designed for mobile video surveillance applications. The cameras are compliant with EN 62262 IK10, mandatory sections of EN 50155,¹ and support a -40 to 60°C operating temperature range. With a rugged M12 Ethernet port, ONVIF Profile S, T, M, standardization, PoE power inputs, IP66-rated, and the option of changing the different fixed focal-length lens, the VPort P07-2 cameras will perform reliably in a variety of extreme environmental conditions, making them suitable for a wide variety of mobile video surveillance applications.

Specifications

Ethernet Interface

PoE Ports (10/100BaseT(X), M12 D-coded 4-pin female connector)

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Ethernet Software Features

Protocols

TCP/IP
IPv4/IPv6
UDP
HTTP
RTP/RTSP
ARP
UPnP
FTP
TFTP
SFTP
NTP Client
DNS
QoS
IGMP v3
ICMP
SNMPv1/v2c/v3
DHCP Opt66/67
HTTPS

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

Security Functions

Password	User-level password protection
Filter	IP address
Encryption	HTTPS SSH

Power Parameters

No. of Power Inputs	1
Source of Input Power	PoE (IEEE 802.3af)
Input Current	48 VDC @ 0.097 A
Power Connector	M12 Dcode Ethernet connector

Camera Characteristics

Sensor	1/2.8-in progressive scan CMOS
Lens	VPort P07-2V24M: f=2.4 mm, F2.0, Diagonal 158°, Horizontal 137°, Vertical 76° VPort P07-2V36M: f=3.6 mm, F1.6, Diagonal 117°, Horizontal 95°, Vertical 50° VPort P07-2V42M: f=4.2 mm, F1.6, Diagonal 94°, Horizontal 81°, Vertical 44° VPort P07-2V60M: f=6.0 mm, F1.8, Diagonal 64°, Horizontal 54°, Vertical 30° VPort P07-2V80M: f=8.0 mm, F1.6, Diagonal 48°, 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, Fixed (1/30 to 1/25000 sec)
S/N Ratio	Maximum 50 dB (AGC off; DNR on)
DNR (digital noise reduction)	Built-in 2D/3D DNR
WDR (wide dynamic range)	80 dB
AGC (auto gain control)	2X, 4X, 8X, 16X
Flickerless Control	Automatic, 50 Hz, 60 Hz modes
Image Rotation	Flip, Mirror, 90°, 180°, 270° rotation
Image Setting	Manual tuning with saturation, sharpness, and contrast
Camera Angle	Pan: ±15°, Tilt: 35° to 90° for 2.4mm lens, 20° to 70° for 8.0mm lens, 0° to 90° for other lens (controlled manually)

Video Interface

Video Compression	H.265 (MPEG-H part 2/HEVC), H.264 (ISO/IEC 14496-10/AVC), or MJPEG
Video Output	via Ethernet
Video Streams	4 independent video streams

Video Resolution and FPS (frames per second)	NTSC		PAL	
	Size	Max. FPS	Size	Max. FPS
CIF	352 x 240	60*/30	352 x 288	50*/25
VGA	640 x 480	60*/30	640 x 480	50*/25
4CIF	704 x 480	60*/30	704 x 576	50*/25
Full D1	720 x 480	60*/30	720 x 576	50*/25
SVGA	800 x 600	60*/30	800 x 600	50*/25
HD	1280 x 720	60*/30	1280 x 720	50*/25
WXGA	1280 x 800	60*/30	1280 x 800	50*/25
Full HD	1920 x 1080	60*/30	1920 x 1080	50*/25

Note: * The FPS can be up to 60 and 50 respectively when the WDR function is disabled.

Video Viewing	<p>DynaStream™ support for changing the video frame rate automatically</p> <p>CBR Pro™ for good image quality in limited bandwidth transmissions</p> <p>3 privacy mask areas provided</p> <p>Adjustable image size and quality</p> <p>Timestamp and text overlay</p> <p>OSD (On Screen Display) position adjustable</p> <p>LDC (Lens distortion correction) for less image warp</p> <p>Maximum of 5 simultaneous unicast connections, 50 multicast clients</p>
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Camera Software Development	
Video Standards	ONVIF Profile S, T, M

Camera Alarm Software Features	
Intelligent Video	Camera tampering detection
Video Motion Detection	3 independently configurable areas
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
Pre-Alarm Buffer	Video buffer for JPEG snapshot images

Software Requirements	
Memory Size	8 GB
Operating System	Windows 10 or above
Browser	Internet Explorer 11 or above Chrome: Version 118 or above Microsoft Edge: Version 118 or above
Multimedia	DirectX 12 or above

Physical Characteristics	
Housing	Plastic top cover, metal bottom plate IP66 rain and dust protection IK10 vandal resistant protection Transparent PC cover
Dimensions	110 x 47 mm (4.33 x 1.85 in)

Weight	310 g (0.68 lb)
Installation	Panel mounting
Environmental Limits	
Operating Temperature	-40 to 60°C (-40 to 140°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, IP66
Vandal Resistance	EN 62262, IK10
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: 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 PFMF
Freefall	IEC 60068-2-31
Railway Fire Protection	EN 45545-2
Safety	UL 62368-1 BSMI
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)

Warranty

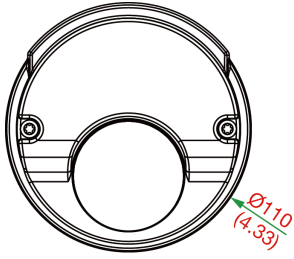
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

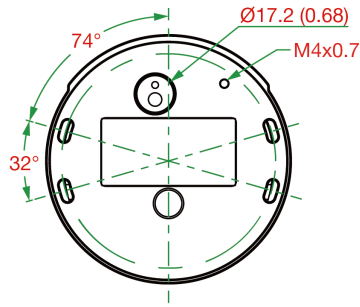
Device	1 x VPort P07-2 Series camera
Installation Kit	1 x sticker 1 x L-type Torx screwdriver 4 x indented hexagonal head tapping screws, nuts, gaskets, and spring washers
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

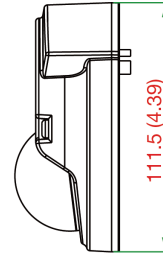
Unit: mm (inch)



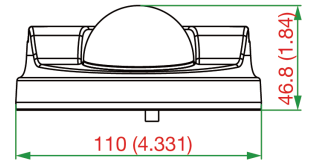
Top View



Bottom View



Side View



Front View

Ordering Information

Model Name	Lens	Power Input	Operating Temp.
VPort P07-2V24M	2.4 mm	PoE	-40 to 60°C
VPort P07-2V36M	3.6 mm	PoE	-40 to 60°C
VPort P07-2V42M	4.2 mm	PoE	-40 to 60°C
VPort P07-2V60M	6.0 mm	PoE	-40 to 60°C
VPort P07-2V80M	8.0 mm	PoE	-40 to 60°C

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