

VPort 66-2MP Series

1080P PTZ dome IP camera for outdoors



- > -40 to 65°C operating temperature
- > Maximum 1920x1080 resolution at 60 FPS (single stream)
- > Supports 360° endless PAN and -6° to +96° TILT
- > 22X, 30X optical zoom, and 20X digital zoom
- > DNR, BLC, and image stabilizer for superb image quality
- > Built-in 4.3 to 94.6 mm (22X) or 4.3 to 129 mm (30X) focal length lens with ICR (IR-cut filter removable)
- > Triple video streams with H.264 and MJPEG
- > IP66 rain and dust protection and NEMA Type 4X form factor
- > NTCIP 1205 support for ITS system
- > Calibrate PTZ movement manually or by schedule
- > Smart PTZ tracking (Pending)



Introduction

The VPort 66-2MP is a vandal-proof, IP66-rated, PTZ speed dome IP camera for use in harsh, outdoor environments. With a 360° endless PAN, -6 to 96° TILT and 22X, 30X, optical/20X digital zoom, H.264/MJPEG triple video streams, and day-and-night camera lens, the VPort 66-2MP is especially well-suited for outdoor video surveillance

applications. In addition, the VPort 66-2MP supports NTCIP 1205, which is an ITS (intelligent transportation system) communication protocol standard. NTCIP support allows the user to control PTZ operation directly via the NTCIP-compliant control panel.

Specifications

Camera

Sensor: 1/2.8" HD progressive scan CMOS

Lens:

22X: f=4.3 mm (wide) to 94.6 mm (tele), F1.6 to F4.5
 30X: f=4.3 mm (wide) to 129.0 mm (tele), F1.6 to F4.7

Minimum Illumination:

- Color: 0.4 lux, at F1.6 (Gain High, 50 IRE, 1/30 sec)
- B/W: 0.03 lux, at F1.6 (Gain High, 50 IRE, 1/30 sec)

Minimum Working Distance: 100 mm

Day & Night: Auto/Color/BW

Synchronization: Internal

White Balance: ATW, AWB

Electronic Shutter: Auto, Fixed (1/120 (1/100), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/16000 sec)

S/N Ratio: Over 50 dB (AGC OFF)

ICR Control: Auto

DNR: Built-in 2D/3D DNR (digital noise reduction)

Auto Focus: Continuous, one-shot

AGC (auto gain control): Off, Level 1 to 7

BLC (back light compensation): Off, Level 1 to 15

Sense Up: On/Off, maximum 128X

IRIS: Auto/Manual IRIS control, Electronic IRIS

Flickerless Control: On/Off

Electronic Image Stabilizer: Low, Medium, High

WDR: 50 db

Image Rotation: Flip, Mirror, and 180° rotation

Image Setting: Manual tuning with sharpness

Video

Video Compression: H.264 (ISO/IEC 14496-10) or MJPEG

Video Output: via Ethernet

Video Streams: 3, H.264, or MJPEG video streams

Video Resolution and FPS (frames per second):

	NTSC		PAL	
	Size	Max. FPS	Size	Max. FPS
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
SXGA	1280 x 1024	30	1280 x 1024	25
Full HD	1920 x 1080	30	1920 x 1080	25

Note: Single video stream supports up to 60 FPS.

Video Viewing:

- DynaStream™ supported for changing the video frame rate automatically
- Adjustable image size and quality
- Timestamp and text overlay
- Maximum of 5 simultaneous unicast connections, 50 multicast clients
- CBR Pro™ supported for accurate streaming bit rate control

Audio

Audio Inputs: 1, line-in, with 2-pin terminal block connector
Audio Outputs: 1, line-out, with 2-pin terminal block connector
Audio Format: Mono, PCM (G.711); AAC

Network

Protocols: TCP, UDP, HTTP, SMTP, FTP, Telnet, NTP, DNS, DHCP, UPnP, RTP, RTSP, ICMP, IGMPv3, QoS, SNMPv1/v2c/v3, DDNS, Modbus/TCP, 802.1X, SSH/HTTPS
Ethernet: 1 10/100BaseT(X) Ethernet port, RJ45 connector

GPIO

Digital Inputs: 1, max. 8 mA
 • High: +13 to +30 V
 • Low: -30 to +3 V
Relay Output: 1, max. 24 VDC @ 1 A

Local Storage

SD Socket: Standard SD socket (SDHC)

Power Requirements

Input: 24 VAC/VDC, with heater and fan redundant power design
Power Consumption:
 • 27 watts when heater and fan are off
 • 31 watts when fan is on and heater is off
 • 71 watts when fan and heater are on

Physical Characteristics

Housing:
 • IP66-rated rain and dust protection connector
 • EN 62262 IK10 vandal-resistant support
 • NEMA Type 4X
 • Metal housing, PC dome cover

Installation: Outdoor mounting with accessory

Alarms

Video Motion Detection: Includes sensitivity tuning
Scheduling: Daily repeat timing schedule
Imaging: JPEG snapshots for pre/trigger/post alarm images
Custom Alarms: HTTP event servers and CGI events for setting customized alarm actions
Email/FTP Messaging: Automatic transfer of stored images via email or FTP with event-triggered actions
Pre-alarm Buffer: 35 MB for JPEG snapshot images

PAN/TILT/ZOOM

Pan Range: 360° endless, manual control speed from 0.15°/s to 120°/s
Tilt Range: -6° to +96°, manual control speed from 0.15°/s to 120°/s
TILT Capability: 6° above the horizon
Optical Zoom: 22X, 30X
Digital Zoom: 20X

Preset Positions: 128 presets

- Preset moving speed: from 1°/s to 255°/s
- Alarm trigger moving speed: 360°/s

Functionality:

- Supports guard tours
- Auto tracking (pending)

Security

Password: User level password protection
Filtering: By IP address
Authentication: 802.1X
Encryption: HTTPS, SSH

Environmental Limits

Operating Temperature: -40 to 65°C
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL 60950-1
Railway: Compliant with EN 50121-4
EMC: EN 55022/24
EMI: CISPR 22, 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: Signal: 2 kV
 IEC 61000-4-8

Shock: IEC60068-2-27*

Vibration: IEC60068-2-6*

Salt Spray Test: ASTM-B117

*This unit can pass the test criteria without being damaged, but if the camera is repositioned, PAN/TILT calibration needs to be redone.

Warranty

Warranty Period: 3 years (moving parts are limited to 1 year warranty)
Details: See www.moxa.com/warranty

Minimum Viewing System Requirements

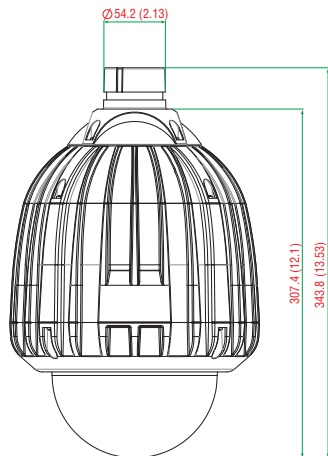
CPU: Pentium 4, 2.4 GHz
Memory: 512 MB of memory
OS: Windows XP/2000 with SP4 or above
Browser: Internet Explorer 6.x or above
Multimedia: DirectX 9.0c or above

Software Development Kit

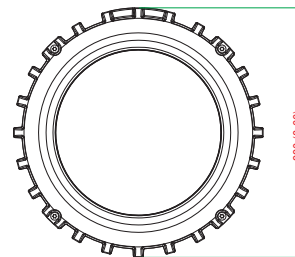
VPort SDK PLUS: Includes CGI commands, ActiveX Control, and API library for customized applications or system integration for third-party developers (latest version available on Moxa website).
Standard: ONVIF

Dimensions

Unit: mm (inch)



Side Views



Bottom View

Ordering Information

Available Models

VPort 66-2MP-CAM22X: 1080P PTZ dome IP camera, 22X optical zoom, RJ45 Ethernet port, 24 VAC/ VDC, -40 to 65°C

VPort 66-2MP-CAM30X: 1080P PTZ dome IP camera, 30X optical zoom, RJ45 Ethernet port, 24 VAC/ VDC, -40 to 65°C

Optional Accessories (can be purchased separately)

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

DR-4524/75-24/120-24: 45/75/120 W DIN-rail 24 VDC power supplies

MDR-40-24/60-24: 40/60 W DIN-rail 24 VDC power supplies, -20 to 70°C operating temperature

Package Checklist

- VPort 66-2MP series IP camera
- 3.5 mm jack to 2-pin terminal block connector
- L-type Torx screw driver
- Dry bag and hook fastner
- Quick installation guide (printed)
- Documentation and software CD
- Warranty card

Wall Mounting Kit

VP-520LB

Dimensions: 204(W) x 284(H) x 255(D) mm

Weight: 3.1 kg

Material: Aluminum



Pendant Mount Kit

VP-520HB

Dimensions: 284(L) x 204(W) x 149.5(H) mm

Weight: 2.7 kg

Straight tube (optional): 300 mm

Material: Aluminum



Pole Mount Kit (for VP-520LB)

VP-510CPM

Dimensions: 275(W) x 91(H) x 182(D) mm

Weight: 0.5 kg

Material: Aluminum

Stainless Strap: 2



Sunshield (for VPort 66-2MP)

VP-SH1

Dimensions: 236(Ø) x 180(H) mm

Weight: 0.5 kg

Material: Aluminum

