



# VPort 56-2MP Series

**1080P, rugged, day-and-night zoom IP cameras**



- > -40 to 75°C operating temperature (fan not required)
- > Maximum 1920x1080 resolution at 30 FPS
- > 10x optical zoom and 16x digital zoom
- > 3D DNR, BLC, and image stabilizer for superb image quality
- > Triple video streams with H.264 and MJPEG
- > Optional model with built-in single mode fiber
- > Two-way and full duplex audio input/output
- > DynaStream™ and CBR Pro™ support for network efficiency
- > SD card interface for disconnection and event recording



## : Introduction

The VPort 56-2MP series includes the world's first rugged IP zoom cameras that can survive in extreme temperatures ranging from -40 to 75°C (T models), without a built-in or external fan. Models with a 0 to 60°C operating temperature range are also available. The VPort 56-2MP cameras are industrial-grade 1080P resolution (1920 x 1080) H.264 IP box cameras designed for mission critical environments.

With advanced optical technology featuring 10x optical and 16x digital zoom, the cameras greatly improve the efficiency of your surveillance work and ensure the best video quality. With optional housing and PT scanner accessories available, the VPort 56-2MP series is suitable for virtually any kind of indoor or outdoor installation.

## : Specifications

### Camera

- Sensor:** 1/2.5" HD progressive scan CMOS
- Lens:** 10X: f=6.3 mm (wide) to 63 mm (tele), F1.8 to F2.5
- Horizontal angle of view: 50.6° to 5.5°
- Vertical angle of view: 39.3° to 3.1°
- Diagonal angle of view: 57° to 26.2°
- Illumination:**
- Color: 2.0 lx (1/30 sec, 50 IRE, F1.8, Gain: High)
- B/W: 0.1 lx (1/30 sec, 50 IRE, F1.8, Gain: High)
- Day & Night:** Color/BW; ICR Control
- Synchronization:** Internal
- White Balance:** ATW/AWB
- Electronic Shutter:** Auto, Fixed (1/50 to 1/10000 sec)
- S/N Ratio:** More than 50 dB (AGC off)
- ICR Control:** Auto (light sensor control) or DI control
- DNR:** Built-in 3D DNR (digital noise reduction)
- Auto Focus:** Continuous
- AGC (auto gain control):** Off, Levels 1 to 7
- BLC (back light compensation):** Off, Levels 1 to 15
- Sense Up:** on/off, maximum 64X
- IRIS:** Auto/Manual IRIS control, Electronic IRIS
- Electronic Image Stabilizer:** Low, Medium, High
- Flickerless Control:** On/Off
- Image Rotation:** Flip, Mirror, and 180° rotation
- Image Setting:** Manually tune sharpness
- 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

### 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
Full HD	1920 x 1080	30	1920 x 1080	25

Note: Up to 30/25 FPS for each of 3 independent streams at max resolution.

### Video Viewing:

- DynaStream™ support for changing the video frame rate automatically
- CBR Pro™ support for accurate streaming bit rate control
- 8 privacy mask areas provided
- Adjustable image size and quality
- Timestamp and text overlay
- Maximum of 5 simultaneous unicast connections, 50 multicast clients
- ROI (Region of Interest) configuration for up to 3 areas

### Audio

- Audio Inputs:** 1 Line-in with 3.5 mm phone jack
- Audio Outputs:** 1 Line-out with 3.5 mm phone jack
- Audio Format:** Mono, PCM (G.711)

### 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, or 1 100BaseFX, single mode
- Serial Port**
- PTZ Ports:** 1, RS-485, terminal block connector

### Local Storage

**SD Socket:** Standard SD socket (SDHC, SDXC)

### GPIO

**Digital Inputs:** 1, max. 8 mA

- High: +13 to +30 V

- Low: -30 to +3 V

**Relay Outputs:** 1, max. 24 VDC @ 1 A

### LED Indicators

**STAT:** Indicates if the system is booted properly or not

**Network:** 10 Mbps or 100 Mbps

**Power:** Power on/off

### Power Requirements

**Input Voltage:** 24 VDC (12 to 24 VDC) / 24 VAC, and PoE+ (802.3at) redundant power design

**Input Current:** 12 to 24 VDC, 2.548 to 0.975 A, or 24 VAC, 21.97 W, or 48 VDC (PoE), 0.494 A

**Power Consumption:** 23 W (max.)

### Physical Characteristics

**Housing:** Metal, IP30 protection

**Dimensions:** 90 x 60.92 x 216.1 mm (3.54 x 2.72 x 8.51 in)

**Weight:** 1.415 kg (3.2 lb)

**Installation:** Wall mounting, ceiling mounting, pole mounting, corner mounting

*Note: Optional external housing and mounting accessories may be required.*

### Alarms

**Intelligent Video:** Camera tamper

**Video Motion Detection:** 3 independently configurable areas; includes sensitivity tuning

**Scheduling:** Daily repeat timing schedule

**Imaging:** JPEG snapshots for pre/trigger/post alarm images

**Custom Alarms:** HTTP event and CGI events for setting customized alarm actions

**Email/FTP Messaging:** Automatic transfer of stored images via email or FTP as event-triggered actions

**Pre-alarm Buffer:** 84 MB video buffer for JPEG snapshot images

**PTZ (Pan/Tilt/Zoom)**

**Optical Zoom:** 10X

**Digital Zoom:** 16X

### Environmental Limits

#### Operating Temperature:

Standard Models: -25 to 60°C (-13 to 140°F)

Wide Temp. Models: -40 to 75°C (-40 to 167°F)

**Storage Temperature:** -40 to 85°C (-40 to 185°F)

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

#### Vibration:

IEC 60068-2-6, 2 to 13.2 Hz: 2 mm (peak-peak); 13.2 to 100 Hz: 0.7g; 1.50 hrs/axis

IEC 60068-2-6, 3 to 9 Hz: 7 mm (peak-peak); 9 to 150 Hz: 1.0g; 1.86 hrs/axis

**Shock:** IEC 60068-2-27, 20g/11ms

**Altitude:** 2000 m

### Standards and Certifications

**Safety:** UL60950-1, EN 50121-4, NEMA TS2

**Rail Traffic:** EN 50121-4

**EMC:** EN 55032/24

**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: 10 V/m

IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV

IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV

IEC 61000-4-6 CS: 10 V

IEC 61000-4-8

#### MTBF (mean time between failures)

**Time:** 169,886 hours

**Standard:** Telcordia (Bellcore), GB 25°C

### Warranty

**Warranty Period:** 3 years (limited warranty on moving parts; see Moxa's online warranty policy for details)

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

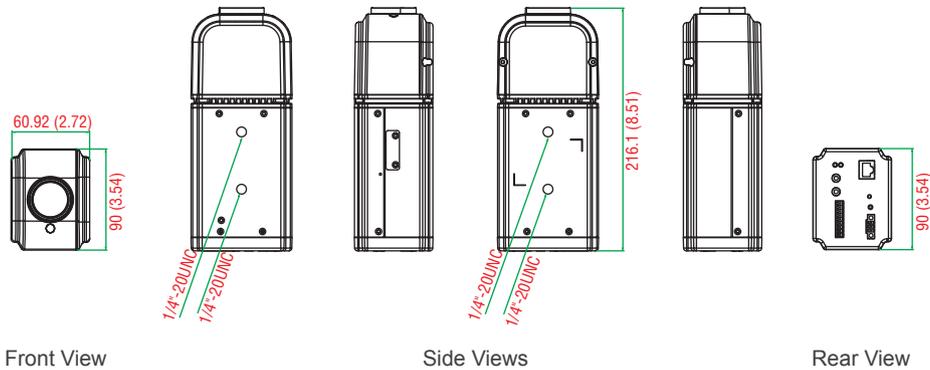
### Software Development

**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 Profile S

### Dimensions

Unit: mm (inch)



## Ordering Information

### Available Models

**VPort 56-2MP-CAM10X:** Full HD zoom IP camera, RJ45 Ethernet port, 12/24 VDC or 24 VAC or PoE+, -25 to 60°C operating temperature

**VPort 56-2MP-CAM10X-T:** Full HD zoom IP camera, RJ45 Ethernet port, 12/24 VDC or 24 VAC or PoE+, -40 to 75°C operating temperature

**VPort 56-2MP-CAM10X-S-SC:** Full HD zoom IP camera, Single-mode fiber Ethernet port, 12/24 VDC or 24 VAC, -25 to 60°C operating temperature

**VPort 56-2MP-CAM10X-S-SC-T:** Full HD zoom IP camera, Single-mode fiber Ethernet port, 12/24 VDC or 24 VAC, -40 to 75°C operating temperature

**Optional Accessories** (can be purchased separately)

**VP-C1701:** IP68-rated outdoor housing, 406(L) x 109(H) x 145 (W) mm

**VP-C1800:** Wall-mounting bracket for outdoor housing, 213 (L) x 146 (H) x 80(W) mm

**VP-C1815:** Pole-mounting bracket for Ø70 to Ø230 mm pole

**VP-C1820:** Pole-mounting bracket for Ø360 mm pole

**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 56-2MP series IP camera
- 9-pin terminal block for RS-485, DI/Relays
- 3-pin terminal block for power input
- Quick installation guide (printed)
- Documentation and software CD
- Warranty card