VPort 56-2MP Series
Quick Installation Guide

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Overview

The VPort 56-2MP series is the world's first rugged IP camera that can tolerate environmental temperatures ranging from -40 to 75°C without cooling fan. It is an industrial-grade, H.264 box-type IP camera that combines Full HD resolution (1920 x 1080), 10x optical zoom, and 16x digital zoom to enhance surveillance system efficiency while delivering state-of-the-art video quality. Optional housing and PT scanner accessories are available for indoor and outdoor installation.

With a built-in removable IR-cut filter and automatic color mode switching, the VPort 56-2MP series is suitable for both day and night use. Highly-tuned ROI (Region of Interest), BLC (Back Light Compensation), and sense up functions enable the VPort 56-2MP to produce exceptionally clear images. The VPort 56-2MP can encode analog video into both H.264 and MJPEG video streams and can transmit up to 3 independent video streams (2 in H.264, and 1 in MJPEG) simultaneously. Advanced video encoding technology enables the camera to support up to 30 fps for each of the H.264 and MJPEG streams.

Package Checklist

Moxa's VPort 56-2MP series is shipped with the following items. If any of these items is missing or damaged, please contact your customer service representative for assistance.

- 1 VPort 56-2MP camera (see ordering information below)
- Terminal block accessory package (3-pin terminal block for power input, 9-pin terminal block for RS-485 DX+ and DX- and I/O)
- Documentation and software CD (includes user's manual, quick installation guide, and VPort utility)
- Quick installation guide (printed)
- Warranty card

NOTE Check the model name on the VPort's side label to verify that the model name is correct for your order.

NOTE This product must be installed in compliance with your local laws and regulations.

Ordering Information

- **VPort 56-2MP-CAM10X:** 0 to 60°C operating temperature
- **VPort 56-2MP-CAM10X-T:** -40 to 75°C operating temperature
- **VPort 56-2MP-CAM10X-S-SC:** 0 to 60°C operating temperature, single mode fiber interface
- **VPort 56-2MP-CAM10X-S-SC-T:** -40 to 75°C operating temperature, single mode fiber interface

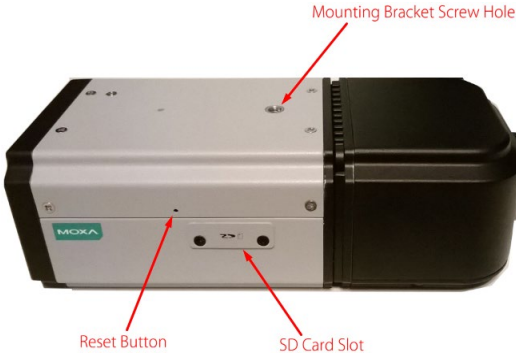
Specifications

Camera
Sensor: 1/2.5" HD progressive scan CMOS
Lens: 6.3 to 63 mm auto focus zoom lens
Illumination: • Color: 0.2 lux at F1.8 • B/W: 0.05 lux at F1.8
Synchronization: Internal
White Balance: ATW, AWB
Electronic Shutter: AES: On/Off Fix: 1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 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
AGC Control: On/Off
Backlight Compensation: On/Off
Auto Exposure: On/Off
Image Rotation: Flip, Mirror, and 180° rotation
Auto Sense Up: On/Off, Max. 64x
Image Setting: Manually tune sharpness
Video
Video Compression: H.264 (ISO/IEC 14496-10) or MJPEG
Video Output: via Ethernet
Video Streams: Up to 3 video streams (2 x H.264 and 1 x MJPEG)
Video Resolution and FPS (frames per second): Up to 30/25 FPS for each of 3 independent streams at max resolution.
Video Viewing: • DynaStream™ supported for automatic adjustment of frame rate • Image stabilizer to reduce video shaking • CBR Pro™ for optimized image quality within limited bandwidth • 8 privacy mask areas provided • Adjustable image size and quality • Timestamp and text overlay • Maximum of 10 simultaneous unicast connections • ROI (Region of Interest) configuration for up to 3 areas
PTZ: Compatible with Videotec Ulisse Netcam PT scanner
Audio
Audio Inputs: 1 Line-in with 3.5 mm phone jack
Audio Outputs: 1 Line-out with 3.5 mm phone jack
Two-Way Audio: Full duplex two-way audio
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, SSL
Ethernet: 1 10/100BaseT(X) Ethernet port, RJ45 connector, or 1 100BaseFX, single mode
Standard: ONVIF
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

Serial Interface
RS-485: 1 full-duplex RS-485 port
LED Indicators
STAT: Indicates if the system is booted properly or not
Network: 10 Mbps or 100 Mbps
Power: Power on/off
Local Storage
SD Socket: Standard SD socket (SDHC, SDXC)
Power Requirements
Input: 12/24 VDC, 24 VAC or Power-over-Ethernet (PoE+, 802.3at), redundant power design
Power Consumption: 23 W
Physical Characteristics
Camera Body Housing: Metal, IP30 protection
Installation: Wall mounting, ceiling mounting, pole mounting, corner mounting (optional external housing and mounting accessory may be required)
Alarms
Video Motion Detection: 3 independently configurable motion areas
Camera Tamper: Sensitivity adjustable camera tamper detection (Pending)
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
Environmental Limits
Operating Temperature: Standard Models: 0 to 60°C (32 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)
Standards and Certifications
Safety: UL 60950-1, EN 50121-4, NEMA TS2
EMI: FCC Part 15, CISPR 32 class A
EMS: EN 61000-4-2 (ESD), Level 3, EN 61000-4-3 (RS), Level 3, EN 61000-4-4 (EFT), Level 3, EN 61000-4-5 (Surge), Level 3, EN 61000-4-6 (CS), Level 3, EN 61000-4-8, EN 61000-4-11
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6
Warranty
Warranty Period: 3 years
Details: See www.moxa.com/warranty

Product Description

Front and Top Panels



- **SD Card Slot:** You can remove the SD card slot cover and insert an SD card for disconnection/event local storage.
- **Mounting Bracket Screw Hole:** Screw holes for fastening the camera to a protective housing.
- **Reset Button:** Use a pointed object to depress the reset button to reboot; push and hold to reboot and restore factor defaults.

Rear Panel

1. Phone jack for audio output
2. Phone jack for audio intput
3. RJ45 port for PoE/non-PoE connection
4. Ground screw for connecting a ground wire
5. 3-pin terminal block for power input
6. LED indicator to show network and system status. Green indicates normal operation.
7. LED indicator to show power status. Green indicates normal operation.
8. 9-pin terminal block for RS-485 and DI and relay.

NOTE The VPort 56-2MP can be powered by a 12 VDC, 24 VDC, or 24 VAC input or Power-over-Ethernet (PoE+, 802.3at). Use an external power supply together with PoE+ for power redundancy.

Software Installation

Step 1: Configure the VPort 56-2MP's IP address

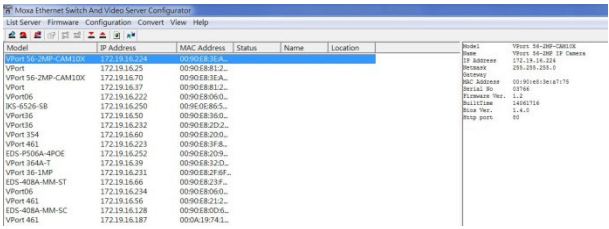
When the VPort 56-2MP is first powered on, the POST (Power On Self Test) will run for a few moments (about 30 seconds). The network environment determines how the IP address is assigned.

Network Environment with DHCP Server

When DHCP is active, the unit's IP address will be assigned by the network's DHCP server. Refer to the DHCP server's IP address table to determine the unit's assigned IP address. You may also use the Moxa VPort and EtherDevice Configurator Utility (edscfgui.exe), as described below:

Using the Moxa VPort and EtherDevice Configurator Utility (edscfgui.exe)

1. Run the edscfgui.exe program to search for the VPort. After the utility's window opens, you may also click on the Search button to initiate a search.
2. When the search has concluded, the Model Name, MAC address, IP address, serial port, and HTTP port of the VPort will be listed in the utility's window.



3. Double click the selected VPort or use the IE web browser to access the VPort's web-based manager (web server).

Non DHCP Server Network Environment

If your VPort 56-2MP is connected to a network that does not have a DHCP server, then you will need to configure the IP address manually. The default IP address of the VPort 56-2MP is 192.168.127.100 and the default subnet mask is 255.255.255.0. Note that you may need to change your computer's IP address and subnet mask so that the computer is on the same subnet as the VPort.

To change the IP address of the VPort manually, access the VPort's web server, and then navigate to the **System Configuration → Network → General** page to configure the IP address and other network settings. Check the **Use fixed IP address** option to ensure that the IP address you assign is not deleted each time the VPort is restarted.

Step 2: Accessing the VPort 56-2MP's web-based manager

Type the IP address in the web browser's address input box and then press enter.

Step 3: Install the ActiveX Control Plug-in

A security warning message will appear the first time you access the VPort's web-based manager. The message is related to installing the VPort AcitveX Control component on your PC or notebook. Click **Yes** to install this plug-in to enable the IE web browser for viewing video images.

NOTE For Windows XP SP2 or above operating systems, the ActiveX Control component will be blocked for system security reasons. In this case, the VPort's security warning message window may not appear. Users should unlock the ActiveX control blocked function or disable the security configuration to enable the installation of the VPort's ActiveX Control component.

Step 4: Access the homepage of the VPort 56-2MP's web-based manager.

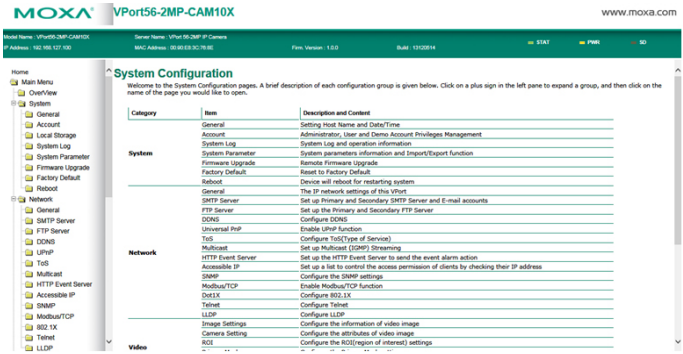
After installing the ActiveX Control component, the homepage of the VPort 56-2MP's web-based manager will appear. Check the following items to make sure the system was installed properly:

1. Video Images
2. Video Information

Step 5: Access the VPort's system configuration

Click on **System Configuration** to access the overview of the system configuration to change the configuration. **Model Name**, **Server Name**, **IP Address**, **MAC Address**, and **Firmware Version** appear in the green bar near the top of the page. Use this information to check the system information and installation.

For details of each configuration, check the user's manual on the software CD.



Wiring Requirements

SAFETY FIRST!

- Be sure to disconnect the power cord before installing and/or wiring your Moxa VPort 56-2MP.
- Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowable for each wire size.
- If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

You should also pay attention to the following:

- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross, make sure the wires are perpendicular at the intersection point.
- You can use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring that shares similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separated.
- It is strongly advised that you label wiring to all devices in the system when necessary.