

Quick Start Guide
4MP 30X PTZ IP Camera
O4P30X



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Welcome

Thank you for purchasing this Network camera!

This manual is designed to be a reference tool for your system.

Please read this manual carefully before operating the unit and retain it for future reference.

Should you require any technical assistance, please contact Speco Technologies Technical Support.

Important Safeguards and Warnings

1 . Electrical safety

All installation and operation here should conform to local electrical safety codes.

Use a certified/listed 12VDC Class 2 power supply only.

Please note: Do not connect two power supplying sources to the device at the same time; it may result in device damage! The product must be grounded to reduce the risk of electric shock.

Improper handling and/or installation could run the risk of fire or electrical shock.

2 . Environment

Heavy stress, violent vibration or exposure to water is not allowed during transportation, storage and installation.

This product should be installed in a cool, dry place away from direct sunlight and heat sources.

Do not install the product in extreme temperature conditions.

Do not expose the camera to electromagnetic radiation. Otherwise it may result in CMOS sensor failure.

Do not block any ventilation openings.

Do not allow water and liquid intrusion into the camera.

3. Operation and Daily Maintenance

Please shut down the device and then unplug the power cable before you begin any maintenance work.

Do not touch the CMOS sensor optic component. You can use a blower to clean the dust on the lens surface.

Always use the dry soft cloth to clean the device. If there is too much dust, use a cloth dampened with a small quantity of neutral detergent. Finally use the dry cloth to clean the device.

Please use a professional optical cleaning method to clean the enclosure. Improper enclosure cleaning (such as using cloth) may result in poor IR functionality and/or IR reflection.

The grounding holes of the product are recommended to be grounded to further enhance the reliability of the camera.

Dome cover is an optical device, please don't touch or wipe cover surface directly during installation and use, please refer to the following methods if dirt is found:

Stained with dirt

Use oil-free soft brush or hair dryer to remove it gently.

Stained with grease or fingerprint

Use oil-free cotton cloth or paper soaked with alcohol or detergent to wipe from the lens

center outward. Change the cloth and wipe several times if it is not clean enough.

Warning

This camera should be installed by qualified personnel only.

All the examination and repair work should be done by qualified personnel.

Any unauthorized changes or modifications could void the warranty.

Statement

This guide is for reference only.

Product, manuals and specifications may be modified without prior notice. Speco Technologies reserves the right to modify these without notice and without incurring any obligation.

Speco Technologies is not liable for any loss caused by improper operation.

Note:

Before installation, check the package and make sure that all components are included. Keep the package material in case the camera needs to be sent back for service or repair. Contact your rep or Speco customer service department immediately if something is broken or missing in the package.

1 Device Check and Installation

1.1 Installation Requirements

Basic Requirement

- All installation and operation here should conform to your local electrical safety codes.
- Before installation, please open the package and make sure all components are included. Please make sure the speed dome installation environment can meet your requirement. If there is special requirement, please contact your local dealer for more information.
- We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

1.2 Check Accessories

Before installation, check the package and make sure that all components are included. Contact your rep or Speco customer service department immediately if something is broken or missing in the package.

Accessory Name	Amount
Network Camera Unit	1
Quick Start Guide	1
Wall Mounting Bracket	1
Installation Accessories Bag	1
CD	1

1.3 Open the Device

Please open the box and then take out the speed dome.

Remove the bracket component, take out the EPE foam around the module, Figure 1-1.

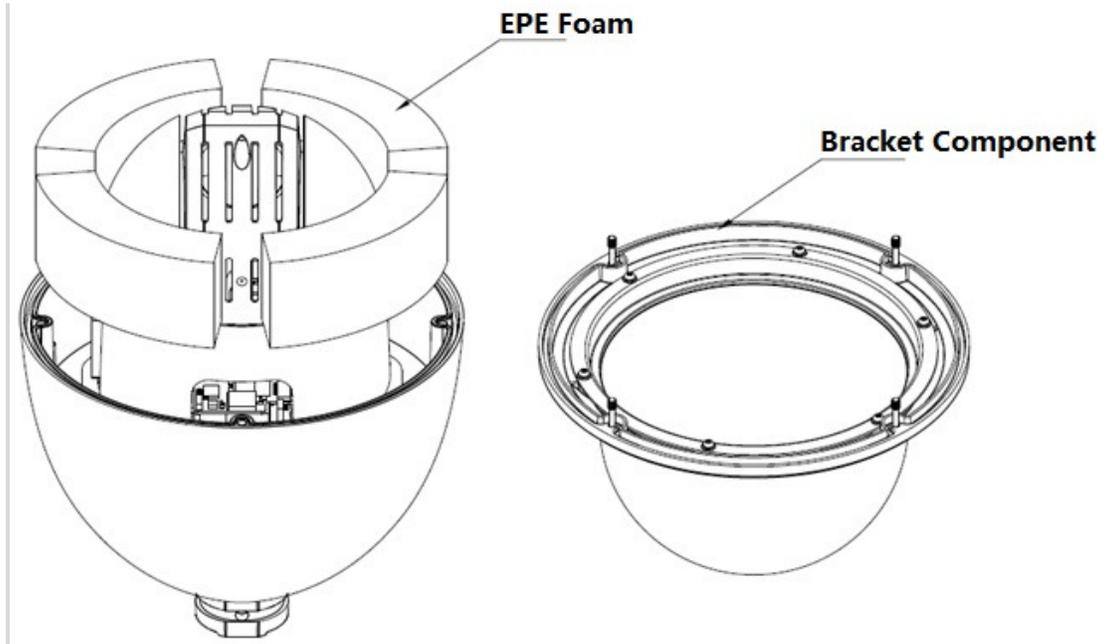


Figure 1-1

1.4 SD Card Installation

Remove the bracket component; open the cover and locate the micro-SD card slot on the module ISP board (see Figure 1-2).

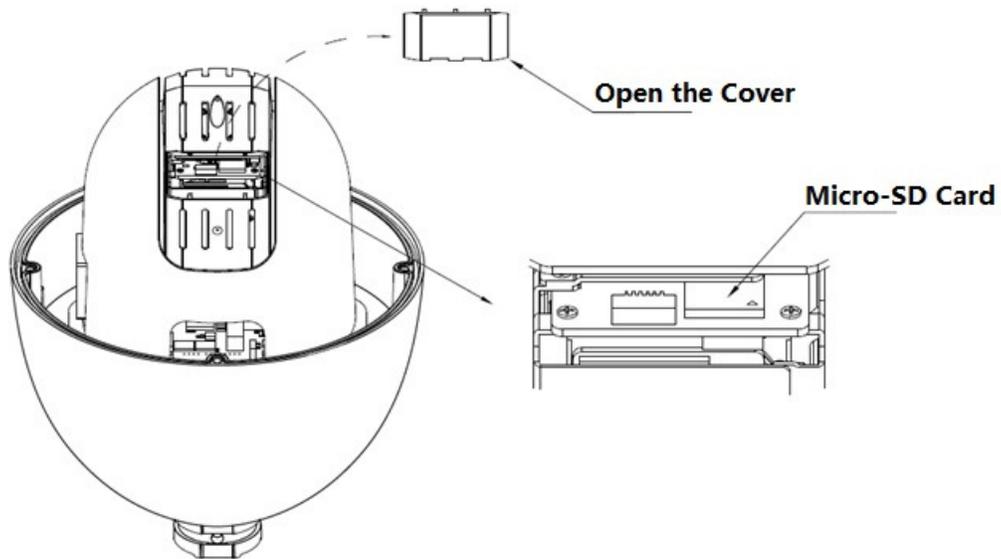


Figure 1-2

1.5 Reset

Locate the reset button on the PTZ mainboard after you remove the bracket component. See Figure 1-3. Reset button is used to reset the camera back to factory default.

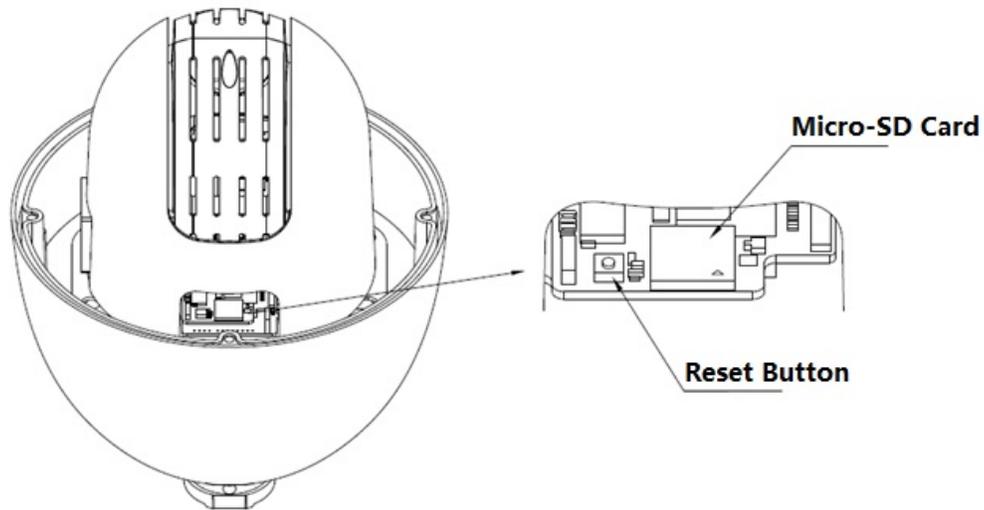


Figure 1-3

1.6 Speed Dome Installation

1.6.1 Quick Installation port

Now you can install the quick installation port. Please twist Teflon tape around the screw thread of the quick installation port and turn it into the screw thread of the wall mount bracket. Use M4 stainless screws to secure firmly. See Figure 1-4.

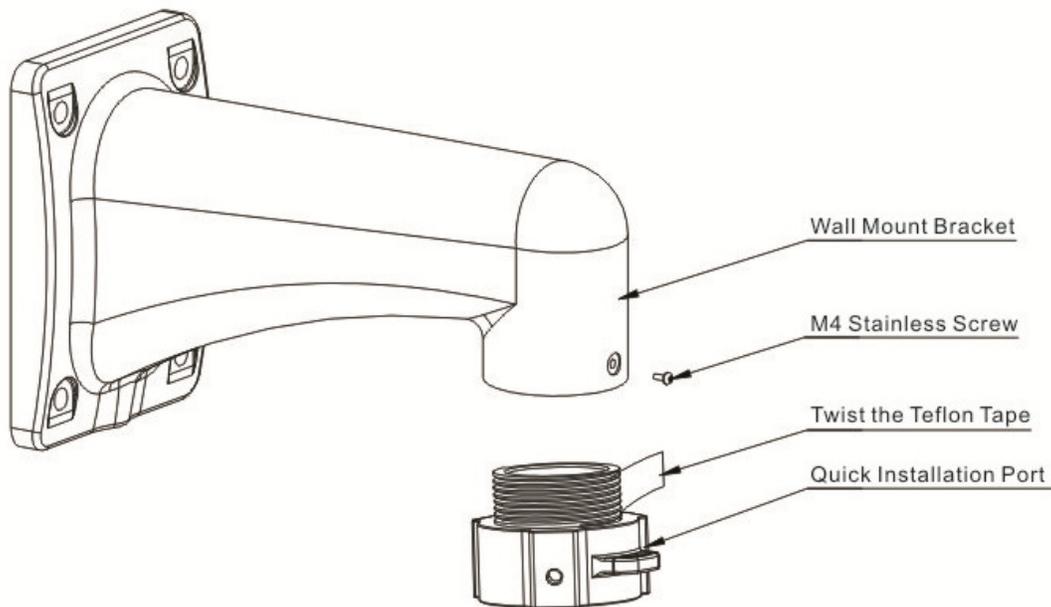


Figure 1-4

1.6.2 Cable Connection

- Connect the safety hook of the intelligent speed dome cover to the hook of the quick installation port.

- Connect the necessary cables.

1.6.3 Install the speed dome

Step 1

Pull the cable to the wall mount bracket slowly.

Step 2

Line up the straight edge of the flange of the speed dome to the straight edge of the quick installation port, and then push the speed dome to the bottom of the port slowly.

Step 3

Use your hands to turn the quick installation port M6*14 stainless screw (with spring washer) to the $\Phi 6.5$ hole of the straight edge of the speed dome. Turn other two M6*14 stainless screws to groove of speed dome flange. Use the inner hex tool to fix these three stainless screws. Now you have completed the installation. See Figure 1-5.

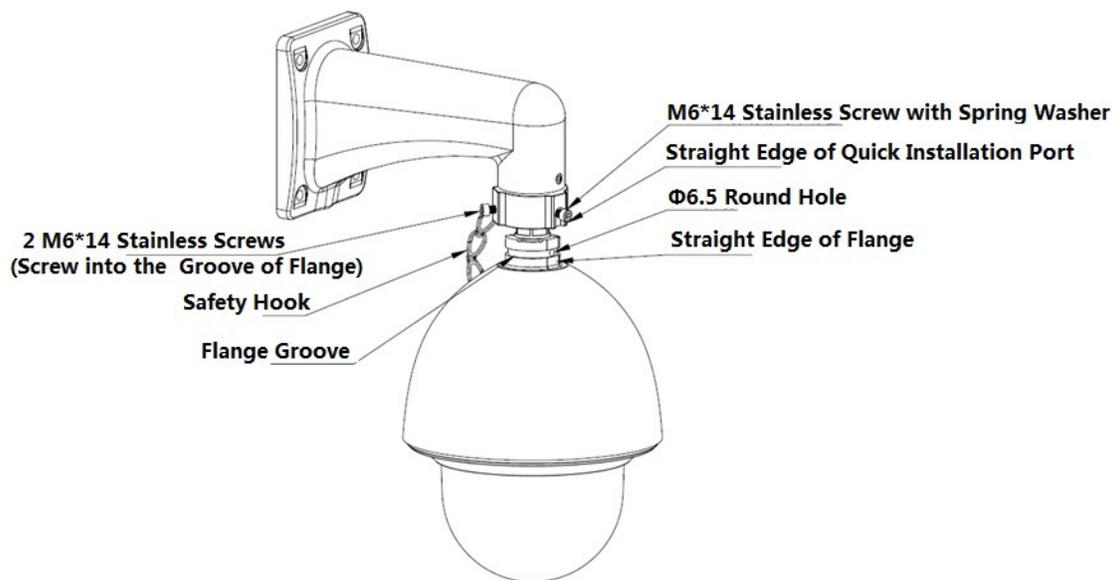


Figure 1-5

Step 4

Please make sure:

- The three stainless screws of the quick installation port are firmly secured.
- The speed dome is fixed.
- The speed dome is straight.
- The safety hook connection is firm.

After your installation, the interface is shown as in Figure 1-6.

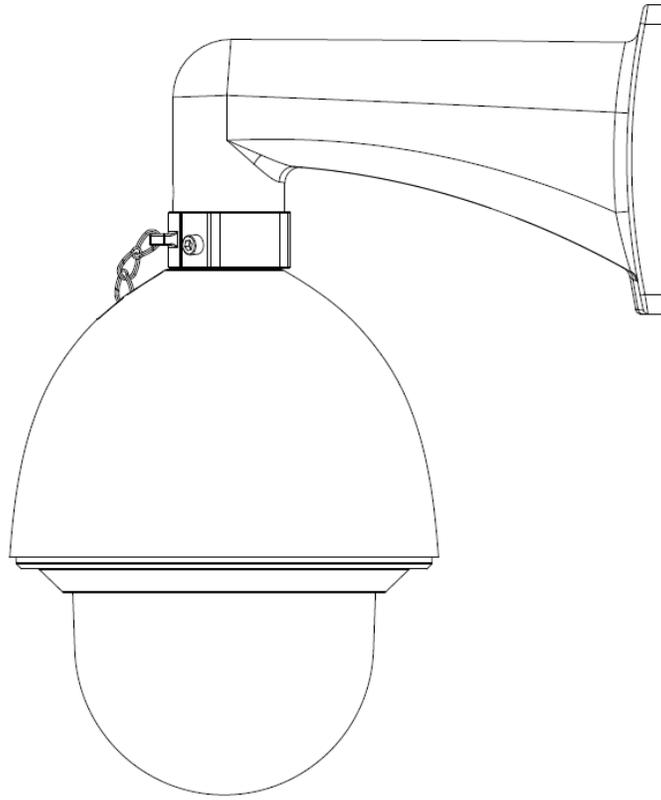


Figure 1-6

2 Bracket Dimensions

2.1 Wall Mount Bracket

The wall mount bracket dimensions are shown as below. See Figure 2-1.

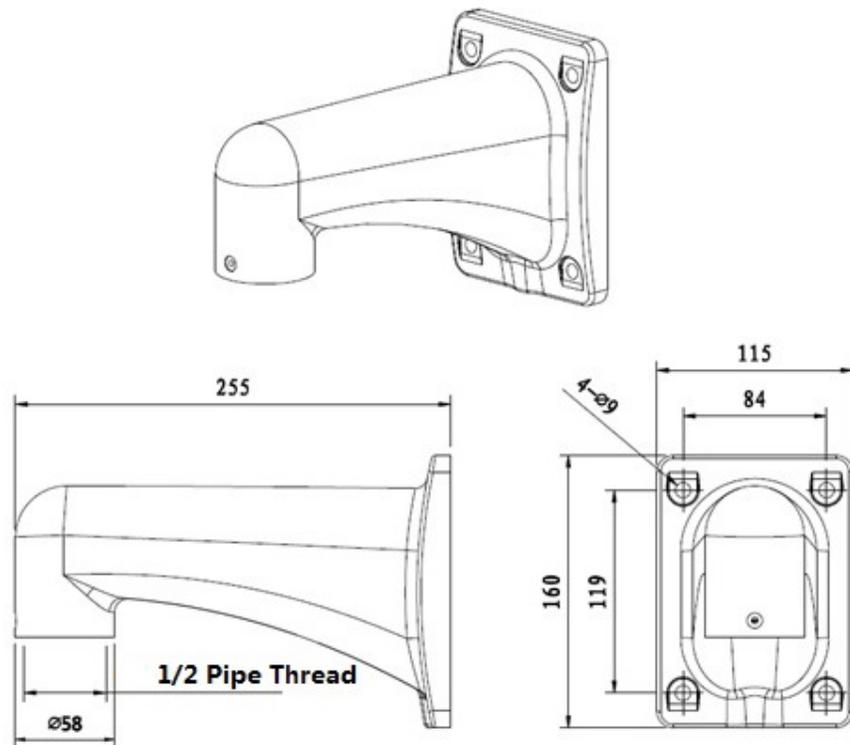


Figure 2-1

3 Wall Mount Installation

3.1 Component Installation

Wall mount bracket is shown as below. See Figure 3-1.

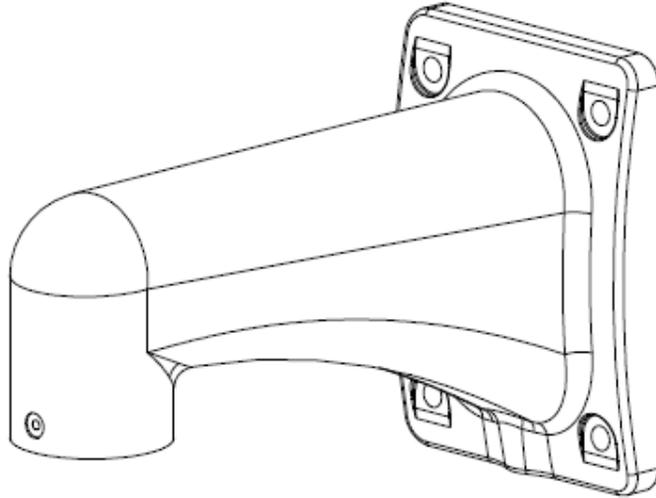


Figure 3-1

3.2 Installation

3.2.1 Installation Requirements

The wall mount speed dome can be installed on a hard surface wall. Before the installation, please make sure:

- The wall is thick enough to install the expansion bolt.
- The wall can at least sustain the 8x weight of the speed dome, bracket and the accessories.

3.2.2 Installation Steps

Step 1

See Figure 3-2. Please draw four holes position in the wall according to the hole of the bottom of the wall mount bracket. Use four hex bolts and flat washer to fix the bracket in the expansion bolts.

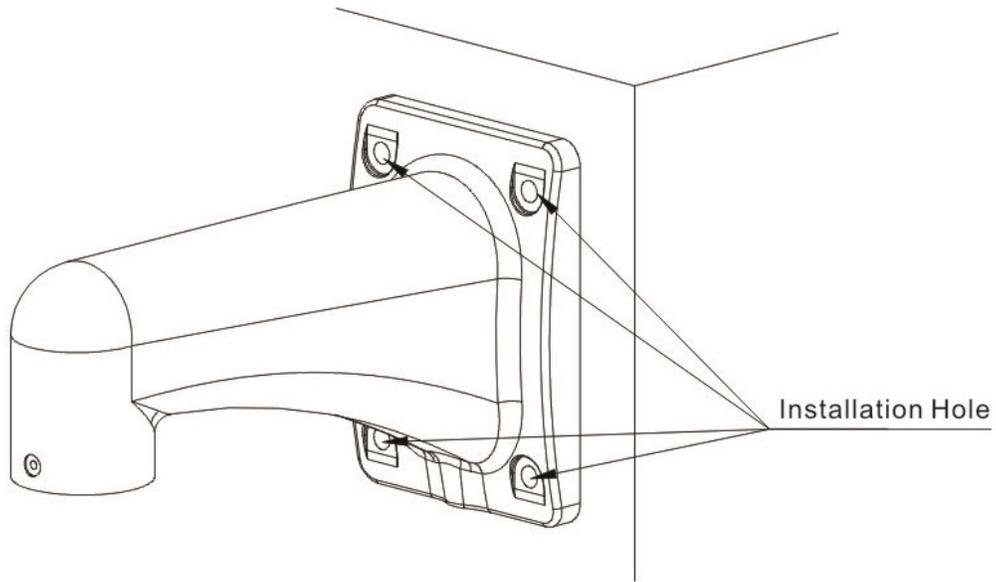


Figure 3-2

Step 2

Install the speed dome on the bracket. See Figure 3-3. Please refer to section 1.6 Speed Dome Installation for more details.

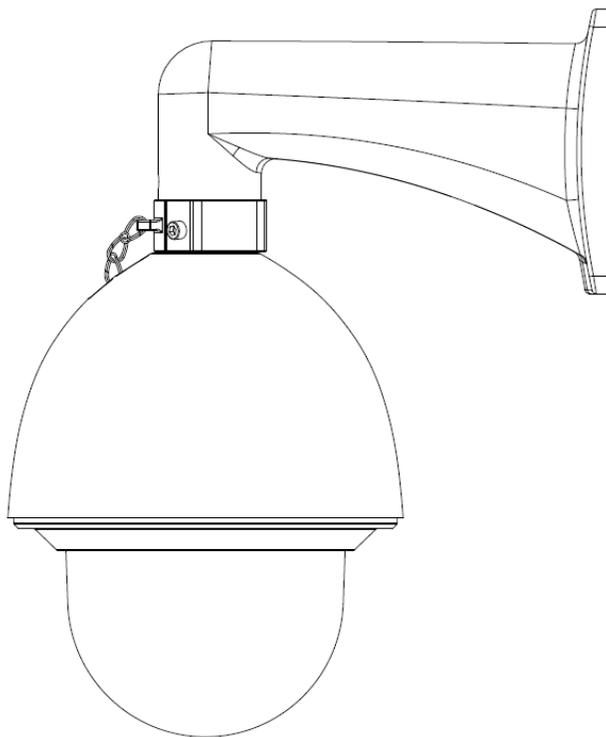


Figure 3-3

4 IP Scanner

4.1 Overview

IP Scanner can search for the device on the local network.

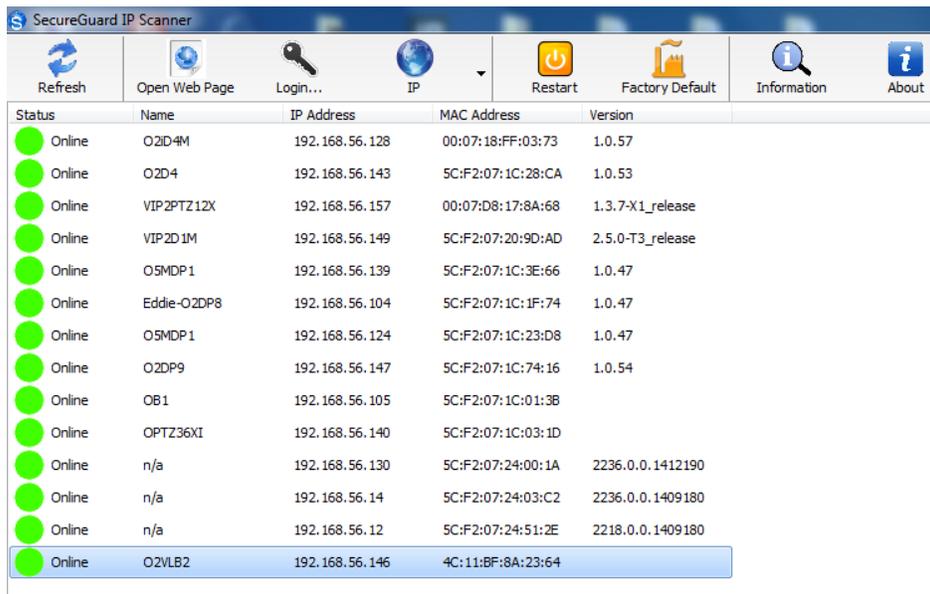
Please note that only devices that are on the same subnet can be discovered.

4.2 Operation

Open up IP Scanner.

Figure 4-1

In the device list, you can view the IP address, model number, and MAC address of each device. Select the applicable device and double click to open up the web viewer.



The screenshot shows the 'SecureGuard IP Scanner' application window. The interface includes a toolbar with buttons for Refresh, Open Web Page, Login..., IP (dropdown), Restart, Factory Default, Information, and About. Below the toolbar is a table listing discovered devices. The table has columns for Status, Name, IP Address, MAC Address, and Version. The last row, representing device O2VLB2, is highlighted in blue.

Status	Name	IP Address	MAC Address	Version
Online	O2D4M	192.168.56.128	00:07:18:FF:03:73	1.0.57
Online	O2D4	192.168.56.143	5C:F2:07:1C:28:CA	1.0.53
Online	VIP2PTZ12X	192.168.56.157	00:07:D8:17:8A:68	1.3.7-X1_release
Online	VIP2D1M	192.168.56.149	5C:F2:07:20:9D:AD	2.5.0-T3_release
Online	O5MDP1	192.168.56.139	5C:F2:07:1C:3E:66	1.0.47
Online	Eddie-O2DP8	192.168.56.104	5C:F2:07:1C:1F:74	1.0.47
Online	O5MDP1	192.168.56.124	5C:F2:07:1C:23:D8	1.0.47
Online	O2DP9	192.168.56.147	5C:F2:07:1C:74:16	1.0.54
Online	OB1	192.168.56.105	5C:F2:07:1C:01:3B	
Online	OPTZ36XI	192.168.56.140	5C:F2:07:1C:03:1D	
Online	n/a	192.168.56.130	5C:F2:07:24:00:1A	2236.0.0.1412190
Online	n/a	192.168.56.14	5C:F2:07:24:03:C2	2236.0.0.1409180
Online	n/a	192.168.56.12	5C:F2:07:24:51:2E	2218.0.0.1409180
Online	O2VLB2	192.168.56.146	4C:11:BF:8A:23:64	

Figure 4-1 IP Scanner

5 Web Operation

This device supports viewing and management via a web browser on a PC.

5.1 Login and Main Interface

Open the browser and input network camera address in the address bar or double click the device in IP Scanner. See Figure 5-1.

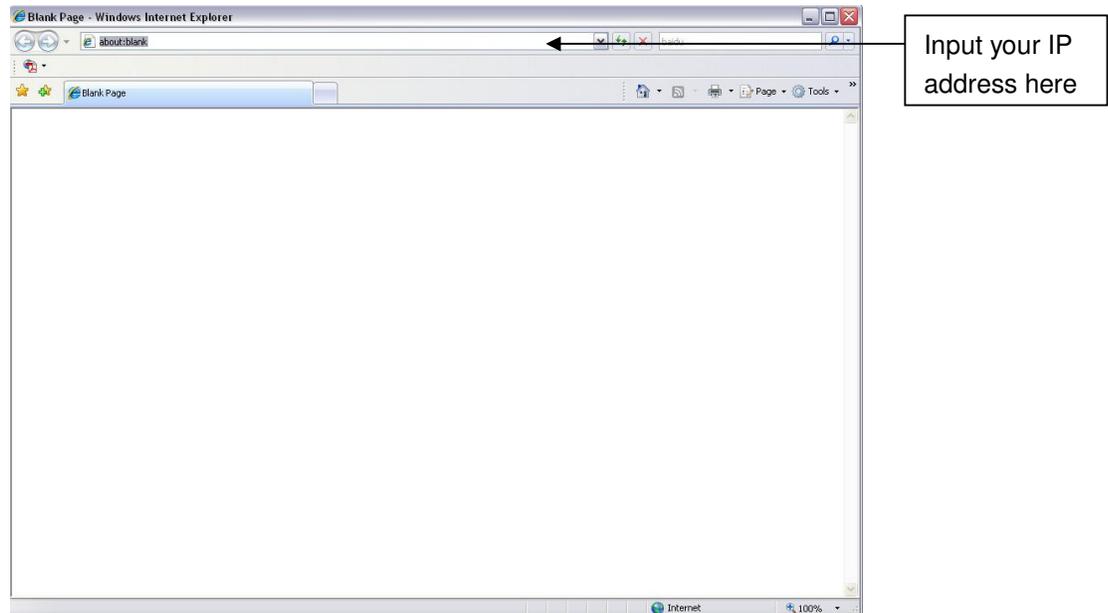


Figure 5-1 IP address

The login interface is shown as below. See Figure 5-2.

Please input your user name and password.

Default user name is **admin** and password is **1234**.

Note: For security purposes, please change the password after initial login.

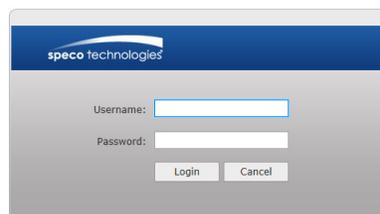


Figure 5-2 Web login

6 APPENDIX | Surge Protection

This device uses TVS lightning protection technology. It can effectively prevent damages from various pulse signals below 2000W, such as sudden lightning and surge. While maintaining your local electrical safety code, you still need to take necessary precaution measures when installing the speed dome in an outdoor environment.

- The distance between the signal transmission cable and high-voltage device (or high-voltage cable) shall be at least 50 meters (164 ft).
- Outdoor cable layout shall go under the penthouse if possible.
- For vast land, please use sealing steel tube under the land to implement cable layout and connect one point to the earth. Open floor cable layout should not be used.
- In areas prone to strong thunderstorms or near high sensitive voltage (such as near high-voltage transformer substation), you need to install additional high-power lightning protection device or lightning rod.
- The lightning protection and earth of the outdoor device and cable shall be considered under the lightning protection of the whole building and conform to your local national or industry standard.
- System shall adopt equal-potential wiring. The earth device shall meet anti-jamming and at the same time conform to your local electrical safety code. The earth device shall not short circuit to N (neutral) line of high voltage power grid or mixed with other wires. When connecting the system to earth alone, the earth resistance shall not be more than 4Ω and earth cable cross-sectional area shall be below 25 mm^2 . See Figure 6-1.

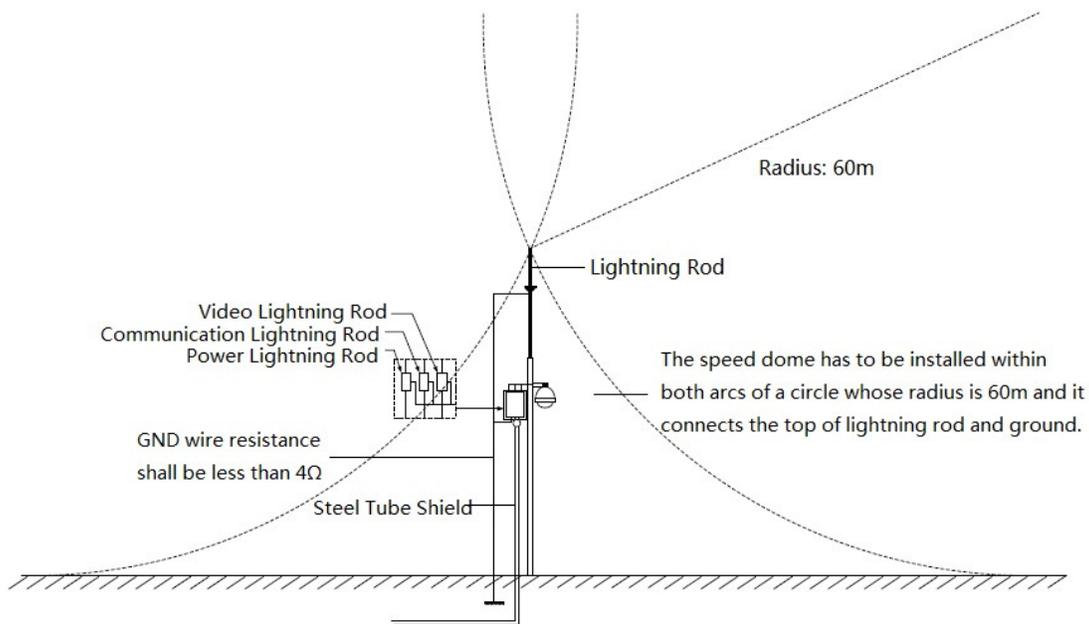


Figure 6-1

7 APPENDIX III 24V AC Cable Diameter and Transmission

Distance Relationship

It is the recommended transmission distance when the cable diameter is fixed and the 24V AC power consumption is below 10%. For the AC device, the max permission voltage power consumption is 10%. For example, when a device of rated power 20W installed from the transformer 141 inches (42m), then the min cable diameter is 0.8000mm.

mm w Feet (m)	0.8000	1.000	1.250	2.000
5	488.52 (148.90)	763.31 (232.66)	1192.67 (363.53)	3053.25 (930.63)
10	244.26 (74.45)	381.66 (116.33)	596.34 (181.76)	1526.62 (465.31)
15	162.84 (49.63)	254.44 (77.55)	397.56 (121.18)	1017.75 (310.21)
20	122.13 (37.23)	190.83 (58.16)	298.17 (90.88)	763.31 (232.66)
25	97.70 (29.78)	152.66 (46.53)	238.53 (72.71)	610.65 (186.13)
30	81.42 (24.82)	127.22 (38.78)	198.78 (60.59)	508.87 (155.10)
35	69.79 (21.27)	109.04 (33.24)	170.38 (51.93)	436.18 (132.95)
40	61.06 (18.61)	95.41 (29.08)	149.08 (45.44)	381.66 (116.33)
45	54.28 (16.54)	84.81 (25.85)	132.52 (40.39)	339.25 (103.40)
50	48.85 (14.89)	76.33 (23.27)	119.27 (36.35)	305.32 (93.06)
55	44.41 (13.54)	69.39 (21.15)	108.42 (33.05)	277.57 (84.60)
60	40.71 (12.41)	63.61 (19.39)	99.39 (30.29)	254.44 (77.55)
65	37.58 (11.45)	58.72 (17.90)	91.74 (27.96)	234.87 (71.59)
70	34.89 (10.64)	54.52 (16.62)	85.19 (25.97)	218.09 (66.47)
75	32.57 (9.93)	50.89 (15.51)	79.51 (24.24)	203.55 (62.04)
80	30.53 (9.31)	47.71 (14.54)	74.54 (22.72)	190.83 (58.16)
85	28.74 (8.76)	44.90 (13.69)	70.16 (21.38)	179.60 (54.74)
90	27.14 (8.27)	42.41 (12.93)	66.26 (20.20)	169.62 (51.70)
95	25.71 (7.84)	40.17 (12.25)	62.77 (19.13)	160.70 (48.98)
100	24.43 (7.45)	38.17 (11.63)	59.63 (18.18)	152.66 (46.53)

8 APPENDIX IV Wire Gauge Reference

Metric bare wire diameter (mm)	AWG	SWG	Bare wire cross section (mm ²)
0.050	43	47	0.00196
0.060	42	46	0.00283
0.070	41	45	0.00385
0.080	40	44	0.00503
0.090	39	43	0.00636
0.100	38	42	0.00785
0.110	37	41	0.00950
0.130	36	39	0.01327
0.140	35		0.01539
0.160	34	37	0.02011
0.180	33		0.02545
0.200	32	35	0.03142
0.230	31		0.04115
0.250	30	33	0.04909
0.290	29	31	0.06605
0.330	28	30	0.08553
0.350	27	29	0.09621
0.400	26	28	0.1257
0.450	25		0.1602
0.560	24	24	0.2463
0.600	23	23	0.2827
0.710	22	22	0.3958
0.750	21		0.4417
0.800	20	21	0.5027
0.900	19	20	0.6362
1.000	18	19	0.7854
1.250	16	18	1.2266
1.500	15		1.7663
2.000	12	14	3.1420
2.500			4.9080
3.000			7.0683