

Siqura MSD620

Indoor Mini IP PTZ Dome with Day/Night and WDR



Note: To ensure proper operation, please read this manual thoroughly before using the product and retain the information for future reference.

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Contents

1	INTRODUCTION	1
2	SAFETY	3
2.1	SAFETY INFORMATION	3
2.2	CAUTIONS	4
2.3	REGULATIONS	5
3	PRODUCT DESCRIPTION	7
3.1	PRODUCT OVERVIEW	7
3.2	GENERAL OPERATION REQUIREMENTS	7
3.3	PACKAGE CONTENTS	8
4	DOME SETUP AND CABLE CONNECTION.....	9
4.1	PREPARING THE SIQURA MSD620 FOR INSTALLATION.....	9
4.2	SWITCH DEFINITION	9
4.3	COMMUNICATION SWITCH CONFIGURATION.....	10
4.4	ESTABLISHING A NETWORK CONNECTION	11
4.5	SYSTEM COMPATIBILITY	12
4.6	DOME CABLE DEFINITION AND REQUIREMENTS	12
4.6.1	<i>Cable requirements</i>	<i>12</i>
4.6.2	<i>Verifying Ethernet connectivity</i>	<i>12</i>
4.6.3	<i>22-pin cable harness.....</i>	<i>12</i>
4.6.4	<i>22-pin connector definition</i>	<i>13</i>
5	DOME INSTALLATION	15
5.1	INSTALLATION SCENARIOS	15
5.2	DOME DIMENSIONS	16
5.3	CEILING MOUNT	16
5.3.1	<i>Hard-ceiling mounting.....</i>	<i>16</i>
5.3.2	<i>In-ceiling mounting</i>	<i>18</i>
5.3.3	<i>Ceiling mounting with a straight tube.....</i>	<i>20</i>
5.4	WALL MOUNT	21
5.4.1	<i>Mini wall mount</i>	<i>21</i>
5.4.2	<i>Wall mounting with gooseneck tube.....</i>	<i>22</i>
5.4.3	<i>Wall box mounting</i>	<i>23</i>
5.5	CORNER MOUNT	24
5.6	POLE MOUNT	25
5.6.1	<i>Pole thin/wide direct mounting.....</i>	<i>25</i>
5.6.2	<i>Pole thin/wide box mounting</i>	<i>26</i>
6	SYSTEM INTEGRATION	29
	APPENDIX A: CAMERA ACCESSORIES	31
	SIQURA MSD620 ACCESSORIES.....	31
	MOUNTING ACCESSORIES.....	32
	APPENDIX B: TECHNICAL SPECIFICATIONS	37

1 Introduction

Document scope

This manual applies to Siqura's indoor and outdoor IP PTZ dome cameras, the Siqura MSD620 series. It describes how to install and connect the Siqura MSD620 camera. Operation and configuration of the Siqura MSD620 camera is covered in the user manual.

Intended audience

This manual is aimed at installers and technicians involved in the installation of network devices, such as the Siqura MSD620.

Assumed skills and know-how

To work with the Siqura MSD620 camera, an installer or technician must have adequate knowledge and skills in the fields of:

- ▶ CCTV systems and components
- ▶ Electrical wiring and low-voltage electrical connections
- ▶ Ethernet network technologies and Internet Protocol (IP)
- ▶ Windows environments
- ▶ Web browsers
- ▶ Video, audio, data, and contact closure transmissions

Video compression methods

Specifications

The information given in this manual was current when published. Siqura reserves the right to revise and improve its products. All specifications are subject to change without notice.

Important information

Before proceeding, please read and observe all instructions and warnings in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service. When unpacking your product, check for missing or damaged items. If any item is missing, or if damage is evident, *do not install or operate this product*. Contact your supplier for assistance.

Typographical Conventions

Before you start using this guide, it is important to understand the typographical conventions used in the documentation. The following kinds of formatting in the text identify special information.

Formatting convention	Type of Information
Numbered list	Step-by-step procedures. You can follow these instructions to complete a specific task.
Special Bold	Items you must select, such as menu options, command buttons, or items in a list.
<i>Emphasis</i>	Used to emphasize the importance of a point or for variable expressions such as parameters.
CAPITALS	Names of keys on the keyboard. for example, SHIFT, CTRL, or ALT.
KEY+KEY	Key combinations for which the user must press and hold down one key and then press another, for example, CTRL+P, or ALT+F4.

2 Safety

In This Chapter

Safety Information	3
Cautions	4
Regulations	5

2.1 Safety Information

Introduction

The safety information contained in this section, and on other pages of this manual, must be observed whenever this unit is operated, serviced, or repaired. Failure to comply with any precaution, warning, or instruction noted in the manual is in violation of the standards of design, manufacture, and intended use of the module. Siqura assumes no liability for the customer's failure to comply with any of these safety requirements.

Trained Personnel

Installation, adjustment, maintenance, and repair of this equipment are to be performed by trained personnel aware of the hazards involved. For correct and safe use of the equipment and in order to keep the equipment in a safe condition, it is essential that both operating and servicing personnel follow standard safety procedures in addition to the safety precautions and warnings specified in this manual, and that this unit be installed in locations accessible to trained service personnel only.

Safety Requirements

The equipment described in this manual has been designed and tested according to the **UL/IEC/EN 60950-1** safety requirements.

Warning: If there is any doubt regarding the safety of the equipment, do not put it into operation.

This might be the case when the equipment shows physical damage or is stressed beyond tolerable limits (for example, during storage and transportation).

Important: Before opening the equipment, disconnect it from all power sources.

The equipment must be powered by a *SELV** power supply. This is equivalent to a Limited Power source (LPS, see UL/IEC/EN 60950-1 clause 2.5) or a "NEC Class 2" power supply. When this module is operated in extremely elevated temperature conditions, it is possible for internal and external metal surfaces to become extremely hot.

* SELV: conforming to IEC 60950-1, <60VDC output, output voltage galvanically isolated from mains. All power supplies or power supply cabinets available from Siqura comply with these SELV requirements.

EMC

The equipment has been tested and found to meet the CE-regulations relating to EMC, and complies with the limits for a Class B device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against interference to radio communications in any installation. The equipment generates, uses, and can radiate radio frequency energy; improper use or special circumstances may cause interference to other equipment or a performance decrease due to interference radiated by other equipment. In such cases, the user will have to take appropriate measures to reduce such interactions between this and other equipment.

Any interruption of the shielding inside or outside the equipment could make the equipment more prone to fail EMC requirements.

Non-video signal lines must use appropriate shielded Cat 5 cabling (S-FTP), or at least an equivalent. Ensure that *all* electrically connected components are carefully earthed and protected against surges (high voltage transients caused by switching or lightning).

ESD

Electrostatic discharge (ESD) can damage or destroy electronic components. *Proper precautions should be taken against ESD when opening the equipment.*

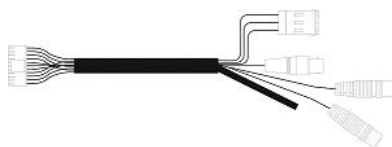
2.2 Cautions

Handle the camera carefully.

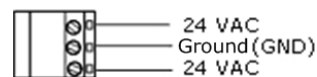
Do not abuse the camera. Avoid striking, shaking, etc. as the camera can be damaged by improper handling or storage.

Install electrical wiring carefully.

Ask a qualified electrician to perform the wiring for the installation. Please note that input electricity to the unit is at a tolerance of 24VAC 50/60 Hz \pm 10%. Ground the camera appropriately to prevent electric shock or damage.



Cable harness



Power input: 3-pin terminal block

Do not disassemble the camera.

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside. Please consult technical support if a camera is suspected of malfunctioning.

Do not operate the camera beyond the specified temperature, humidity, and power source ratings

Use the indoor camera under conditions where the temperature is between 0°C~40°C (32°F~104°F).

Do not block the cooling vent on indoor cameras.

This camera has a cooling fan inside. Blocking the cooling holes may lead to overheating and cause malfunction. Overheating is not covered by warranty.

Do not expose the indoor dome camera to moisture or operate it in wet areas.

The indoor dome camera is designed for indoor use or use in locations where it is protected from rain and moisture. If the indoor camera gets wet, turn the power off immediately and ask a qualified technician for servicing. Moisture can damage the indoor camera and also create the danger of electric shock.


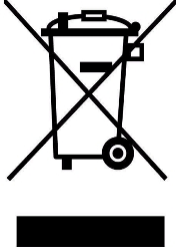

Do not use strong or abrasive detergents when cleaning the camera.

Use a dry cloth to clean the camera when it is dirty. If the dirt is hard to remove, use a mild detergent and wipe gently. To clean the lens, use lens tissue or a cotton tipped applicator and ethanol. DO NOT clean the lens with strong detergents.

Never face the camera towards the sun.

Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects, as this can damage the camera.

2.3 Regulations

	<p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions.</p> <ul style="list-style-type: none"> ▶ This device may not cause harmful interference. ▶ This device must accept any interference received, including interference that may cause undesired operation.
	<p>This symbol on the product or on its packaging indicates that this product shall not be treated as household waste in accordance with Directive 2002/96/EC. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By proper waste handling of this product you ensure that it has no negative consequences for the environment and human health, which could otherwise be caused if this product is thrown into the garbage bin. The recycling of materials will help to conserve natural resources.</p> <p>For more information on how to recycle this product, please contact your local city office, your household waste disposal service or the seller of the product.</p>
	<p>Compliance is evidenced by written declaration from our suppliers, assuring that any potential trace contamination levels of restricted substances are below the maximum level set by EU Directive 2002/95/EC, or are exempted due to their application.</p>

3 Product Description

The Siquira MSD620 PTZ dome camera is designed to deliver superb performance and durability with an intelligent and stylish housing suitable in any security and surveillance installation.

In This Chapter

Product Overview	7
General Operation Requirements	7
Package Contents	8

3.1 Product Overview

Siquira MSD620 Features

- ▶ Quad stream support Dual H.264, MPEG-2, MPEG-4 and MJPEG
- ▶ Open Streaming Architecture (OSA)
- ▶ Up to 144x zoom (12x optical zoom/12x digital zoom)
- ▶ Wide Dynamic Range
- ▶ Back Light Compensation
- ▶ 300° / second Preset targeting
- ▶ 360° endless panning
- ▶ 256 presets/8 programmable cruises
- ▶ 8 alarm in/1 output
- ▶ Two-way audio
- ▶ 16 Privacy Masks
- ▶ Analog Output
- ▶ Polycarbonate bubble
- ▶ 24 VAC

3.2 General Operation Requirements

A minimum of one control device is required for operation, such as a control keyboard, a DVR, or a PC. The Siquira MSD620 contains a built-in receiver that decodes commands originating from a control device.

The built-in Pelco D protocol provides connectivity to other surveillance systems and allows the Siquira MSD620 to be integrated with other suppliers' surveillance systems.

For more detailed information, see Appendix B: Technical Specifications.

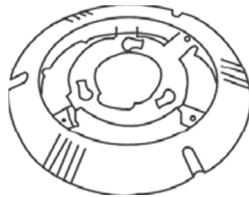
3.3 Package Contents

Before proceeding, please verify that the box contains the items listed here. If any item is missing or has defects, do not install or operate the product. Contact your supplier for assistance.

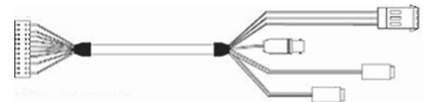
Sigura MSD620 package contents



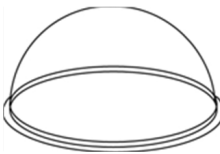
Dome body



Hard-ceiling mount and decorative ring



30 cm cable harness



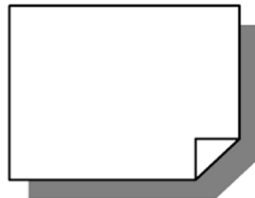
Optical cover



Fixing plate



CD; manuals and software utilities



Quick start guide

4 Dome Setup and Cable Connection

Before installing or connecting the Siqura MSD620, please refer to this section and complete the preliminary preparations for setting up the dome camera and establishing switch settings.

In This Chapter

Preparing the Siqura MSD620 for Installation	9
Switch Definition.....	9
Communication Switch Configuration.....	10
Establishing a Network Connection.....	11
System Compatibility.....	12
Dome Cable Definition and Requirements.....	12

4.1 Preparing the Siqura MSD620 for Installation

This preliminary installation procedure is for the Siqura MSD620 indoor dome camera.

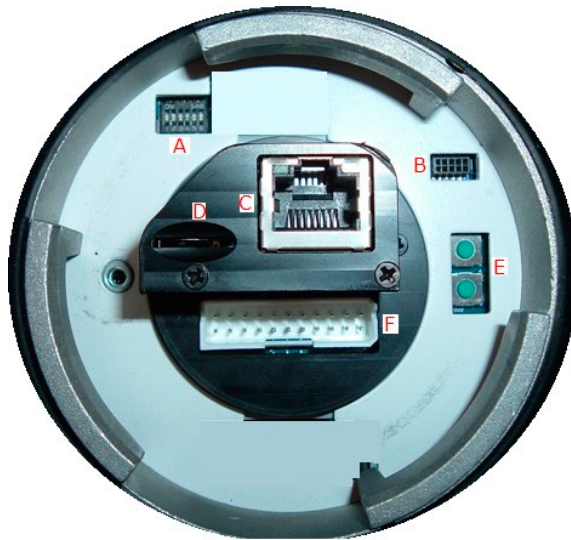
Perform the following steps to prepare the dome camera for installation

1. Unpack the dome package and take out the dome body.
2. Rotate to remove the protective cover.
3. Remove the PE cloth sheet and take off the lens cap.
4. Carefully screw the dome cover onto the camera body.
5. Make a note of the IP address, which is on the label attached to the metal plate on the bottom of the camera. It will not be visible when the dome is assembled. For more information on accessing the camera's internal settings, see Establishing a Network Connection.

4.2 Switch Definition

It is necessary that the dome ID and communication protocol remain in the default modes when connecting the Siqura MSD620 cameras to other devices. The switches used for configuring these settings are located on the bottom of the dome camera. These settings are preset to operate the camera with the IP hardware. Changing the settings may make the camera inoperative using the IP connection.

Refer to the figure and table below for switch location and definitions.



Siqura MSD620 switches

Switch	Definition
A	Communication switch
B	ISP connector (for firmware upgrades)
C	RJ-45/SFP connector
D	SD card slot
E	Reset buttons
F	22-pin connector

Note: Switch E has two buttons. Only the button closest to the 22-pin connector is used to restore factory server defaults. The other button is reserved.

To restore factory server defaults

- Power up the camera while holding button E. Continue to hold the button for 30 seconds after powering the camera.

4.3 Communication Switch Configuration

The Siqura MSD620's communication switch is specified in the table below. The default settings are depicted in the figure. You are advised to verify the accuracy of the communication switch configuration but do not change the default settings, or some functions may not work properly.

Communication Switch	Switch	Description
	1	Reserved
	2	Reserved
	3	Reserved
	4	Line lock
	5	System initialization. Switch 5 is mainly used to restore the camera's factory defaults.
	6	Camera upgrade. Users must reset switch 6 after firmware upgrades are carried out.



4.4 Establishing a Network Connection

To open communication with the Siquira MSD620 from a host PC and change the unit's network settings, perform the following steps.

- Step 1: Set the PC's network adapter to the unit's factory default subnet and connect the two devices.
- Step 2: Access the unit from a web browser or other tool installed on the PC.
- Step 3: Set the unit's IP address and subnet mask to the subnet it will be used in and reboot the unit.

To address the unit from the same PC again, configure the PC's network adapter once more to assign the PC to the same subnet as the unit.

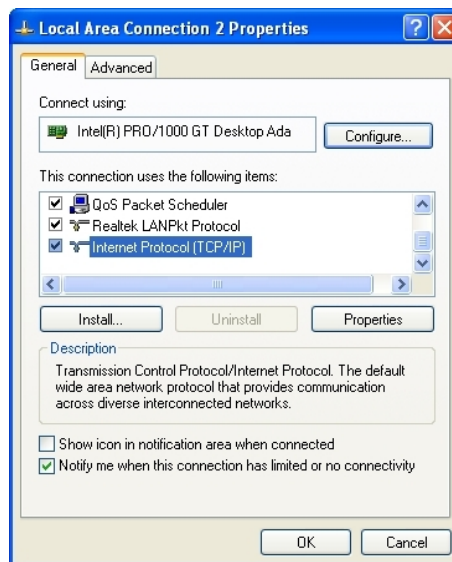
Step 1: Setting the host PC to the factory default subnet of the unit

» To configure the network adapter on the host PC

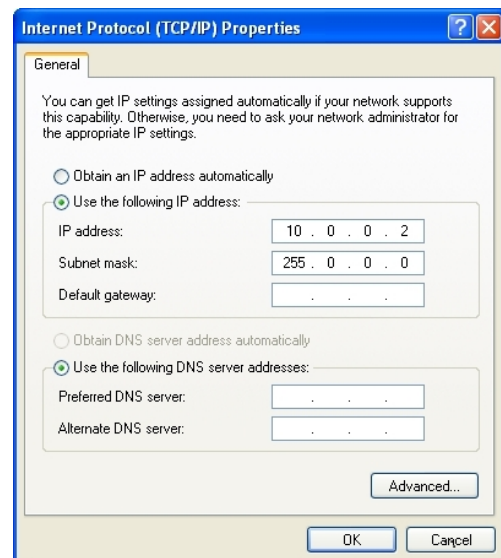
1. In the Control Panel, open **Network Connections**.
2. Right-click the connection to be configured, and select **Properties**.
3. In the items list, select **Internet Protocol (TCP/IP)**.
4. Click **Properties**.
5. In the Internet Protocol (TCP/IP) Properties dialog, click **Use the following IP address**.
6. Enter an IP address that will assign your PC to the same subnet as the unit (i.e., within the 10.x.x.x range). Use 255.0.0.0 as a subnet mask.

Important: To prevent conflicts, be sure to choose a unique IP address. No two devices on a network can have the same IP address.

7. To apply the new settings, click **OK**, and then click **Close**.



Opening IP settings on the host PC



Changing host PC IP settings to the factory-default settings of the unit

At this point, connect your PC to the Siquira MSD620. You can connect them directly using a crossover cable, or connect both to a switch.

Step 2: Accessing the unit

Using a standard web browser you can now log on to the Sigura MSD620's internal web server.

Step 3: Changing the unit's network settings

The Network web page enables you to make the unit's network addressing compatible with the network it will be hooked into. You can set a fixed IP address or have the IP address assigned by a DHCP server. In the latter case, open the Advanced Settings and enable DHCP. Do not forget to save and reboot the unit after changing the settings.

4.5 System Compatibility

To ensure system compatibility, download the latest firmware from **Support > Software** on the Optelecom-NKF web site at <http://www.sigura.com/>. Registration is required.

4.6 Dome Cable Definition and Requirements

For operation, the Sigura MSD620 cameras require either an Ethernet cable or an appropriate fiber optic cable to carry the signals to a remote viewing site and a cable to power the dome.

4.6.1 Cable requirements

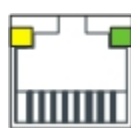
For operation, the camera requires a video and cable harness, as described below.

- ▶ A cable to provide a 24 VAC power supply to the dome.
- ▶ A Cat-5 Ethernet cable.
- ▶ Optional audio cables.
- ▶ Optional coaxial cable to monitor analog video.

Important: Ensure the power supply corresponds with the dome's power requirement, or damage will occur. If any mistake happens, contact a qualified technician.

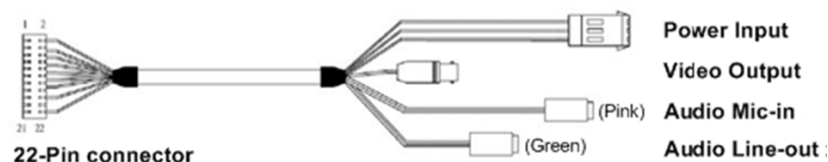
4.6.2 Verifying Ethernet connectivity

Refer to the following figure to determine whether you have established an Ethernet connection.



Ethernet socket LEDs green/yellow
 Green on/off : 100/10 Mbit
 Yellow on/blink
 Yellow off/flash

4.6.3 22-pin cable harness



The Sigura MSD620's 22-pin cable harness

4.6.4 22-pin connector definition

With the 22-pin connector, installers can simply connect the power and video cables to the dome at the same time. The alarm pins are serviceable for connecting alarm input and output devices, such as alarm sensors, sirens, or flashing lights with the surveillance system. For the definition of each pin, please refer to the table below.



22-pin connector

The definitions of each pin are listed in the following table.

Pin	Definition	Cable	Color	Rating
1	AC 24-1/DC (+)	20/18 AWG	Red	
2	Alarm, normally closed		White	Photo Relay output 300V
3	AC 24-2/DC (-)	20/18 AWG	Black	
4	Alarm, normally open		White/black	Photo Relay output 300V
5	FG	20/18 AWG	Yellow	
6	Alarm COM		Green/black	Photo Relay output 300V
7	Audio in		Yellow/black	
8	Audio out	24 AWG	Orange/black	
9	Audio GND		Green/black	
10	Audio GND		Brown/black	
11	ISOG		Blue/white	
12	Alarm 1		Red/white	
13	Alarm 3		Purple	
14	Alarm 2		Gray	
15	Alarm 4		Blue	Input 5V 10KO pull up
16	Alarm 5		White/black	Photo Relay output 300V
17	Alarm 6		Orange/black	
18	Alarm 7		Purple/white	
19	Alarm 8		Gray/black	
20	Alarm GND		Brown/white	Input 5V 10KO pull up
21	Video GND	20 AWG	Black/gray	
22	Video		Red/gray	

5 Dome Installation

Based on the installation environment, the Siquira MSD620 camera can be installed using a ceiling, wall, corner, or pole mount. In the following sections, various installation methods and installation procedures are described in detail.

In This Chapter

Installation Scenarios	15
Dome Dimensions	16
Ceiling Mount	16
Wall Mount.....	21
Corner Mount	24
Pole Mount.....	25

5.1 Installation Scenarios

Choose your installation scenario from the list below for complete instructions for performing that installation.

Important: Whatever your scenario, always use the safety line when attaching the dome.

Ceiling mounts

- ▶ Ceiling mounting with a straight tube

Wall mounts

- ▶ Mini wall mount
- ▶ Wall mounting with gooseneck tube
- ▶ Wall box mounting

Corner mounts

- ▶ Corner Mount

Pole mounts

- ▶ Pole thin/wide direct mounting
- ▶ Pole thin/wide box mounting

For descriptions of the various accessories required for each installation, see Appendix A: Camera Accessories.

Note: Some illustrations in this section use the term "plane washer". This is also known as a flat washer.

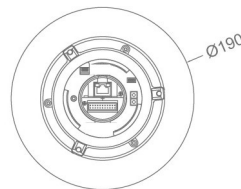
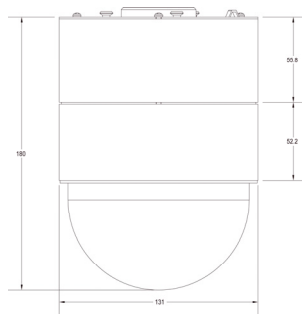


Warning: Fully torque down the mounting bolt that attaches the WM02 tube adapter to the mounting bracket to prevent any movement of the camera due to wind, vibration, etc.

Make sure the camera cannot move at all in its bracket after installation. Any movement of the camera in its bracket can compromise positional accuracy.

5.2 Dome Dimensions

The Sigura MSD620 dome dimensions are 131 x 226 mm (5.2 x 8.9 in.). The diagrams below show detailed dimensions of the dome's different parts.



Sigura MSD620 dimensions

5.3 Ceiling Mount

Generally, there are three ceiling mounting options for the Sigura MSD620 indoor dome camera:

- ▶ Hard-ceiling mounting
- ▶ In-ceiling mounting
- ▶ Ceiling mounting with a straight tube

5.3.1 Hard-ceiling mounting

Hard-ceiling mounting is a standard installation for an indoor dome, and general mounting accessories are equipped in the standard indoor dome camera package. The items and tools needed to mount the dome camera onto a hard ceiling are listed below. The supplied items are found in the dome camera package.

Items Needed

- ▶ Dome camera
- ▶ Hard-ceiling mount and decorative ring (supplied)
- ▶ Fixing plate (supplied)

Tools Needed

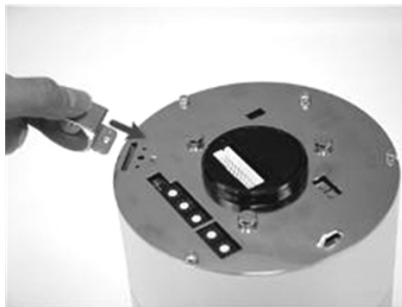
- ▶ Drill
- ▶ Screwdrivers (slotted and Phillips)



Hard-ceiling mounting (cables exposed)

» **To install the Siqura MSD620 high-speed dome camera on a hard ceiling**

1. Screw the fixing plate to the dome body.



Attaching the fixing plate

2. Remove the decorative ring from the hard-ceiling mount.
3. Attach the mount to the ceiling.
4. Thread the cable harness and Ethernet cable through the center hole of the mount and connect the cables to the dome body.



Warning: The clearance hole in the ceiling must accommodate the extended length and diameter of the connector interface and permit proper dressing (bend radiuses) of cables.

Threading the cables through the hard-ceiling mount

5. Rotate clockwise to attach the dome body to the mount and then tighten the fixing plate screw.
6. Remove the optical cover and attach the decorative ring to the mount.
7. Reattach the optical cover.

5.3.2 In-ceiling mounting

The following items and tools are required to mount the dome camera into a ceiling. The supplied items are found in the dome camera package.

Items Needed

- ▶ Dome camera
- ▶ Decorative ring (supplied)
- ▶ CM04 Flush Mount (optional accessory)
- ▶ Supplied screw (supplied with flush mount)
- ▶ Red sticker (supplied with flush mount)

Tools Needed

- ▶ Tool for cutting a circular hole in the ceiling
- ▶ Screwdrivers (slotted and Phillips)

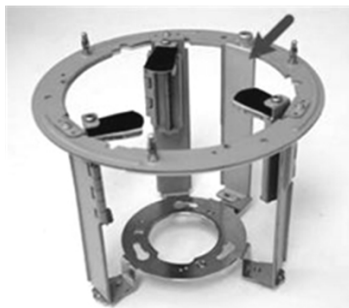


In-ceiling mounting

Note: Insert a ceiling panel prior to installing the dome camera to reinforce the ceiling's strength, if necessary. A ceiling panel may be needed, for example, when installing the dome camera in a suspended ceiling.

▶ To install the Siqura MSD620 high-speed dome camera in the ceiling with a flush mount

1. Detach the removable wing from the flush mount.
2. With the supplied screw, attach the separated wing to the dome body.



Detaching the removable wing from the flush mount



Attaching the wing to the Siqura MSD620

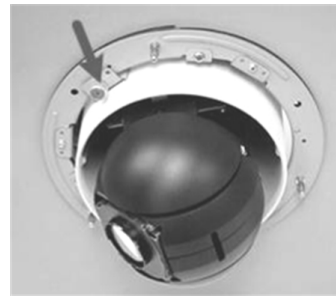
3. Place the red sticker on the ceiling and cut the circle out of the ceiling.
4. Insert the flush mount into the hole.

5. Rotate the flush mount's wings to fix the mount at the edge of the ceiling opening and tighten their screws.



Positioning the flush mount in the ceiling

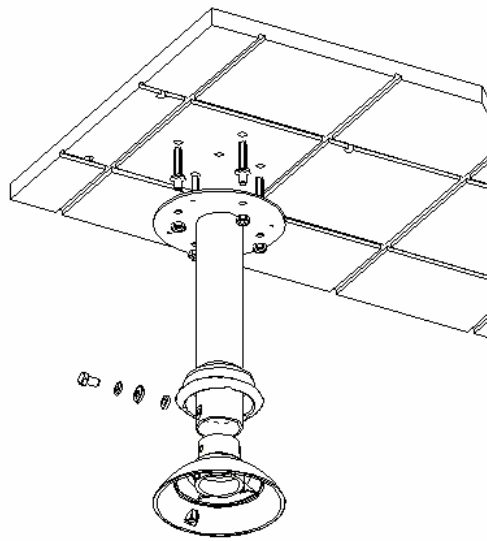
6. Thread the cable harness and Ethernet cable through the center hole of the flush mount and connect them to the dome body.
7. Mount the dome body into the bracket and rotate clockwise.
8. Tighten the fixing screw, as shown in the figure, to secure the dome body.



Securing the dome camera

9. Detach the optical cover, if necessary, and attach the decorative ring to the mount.
10. Reattach the optical cover.

5.3.3 Ceiling mounting with a straight tube



Ceiling Mount: straight tube + indoor tube adaptor + waterproof boot

The straight tube is available in lengths of 25 cm and 50 cm.

Note: For the 50 cm straight tube, the 1.3m cable harness (part CC13) is required.

Items needed

- ▶ Dome camera
- ▶ Straight tube and other equipped items (optional accessory)
- ▶ Screws and screw anchors for fixing the straight tube onto the ceiling (not supplied)
- ▶ Indoor tube adaptor for the Sigura MSD620 (optional accessory)
- ▶ Waterproof boot (supplied with the indoor tube adaptor)

Tools needed

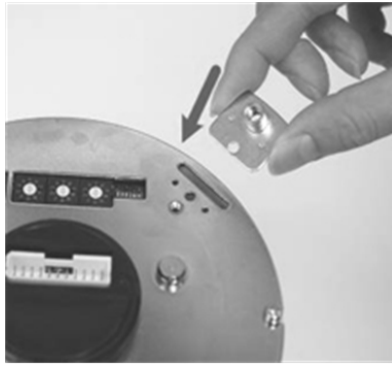
- ▶ Drill
- ▶ Screwdriver

» To mount the dome with the straight tube

1. Ensure that the ceiling can support the weight of the dome camera and straight tube.
2. Make a cable entry hole on the ceiling. Otherwise, cables can be threaded through the cable entry hole on the tube.
3. Attach the waterproof boot to the straight tube.
4. Fix the straight tube to the ceiling with proper screws and screw anchors (not supplied).
5. Thread the cables through the straight tube and the indoor tube adaptor.

Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.

6. Fix the indoor tube adaptor to the straight tube with the supplied screws and washers.
7. Attach the lock screw plate to the dome body with the supplied screw (accessory in the indoor tube adaptor package).



Fastening the indoor tube adaptor's lock screw plate to the Siqua MSD620

8. Adjust the waterproof boot to the junction of the straight tube and the indoor tube adaptor.
9. Connect the cables to the dome camera. Then attach the dome to the tube adaptor and fasten them together with the supplied screw.

5.4 Wall Mount

There are three types of wall mounts for the Siqua MSD620 dome camera.

- ▶ Mounting with a mini wall mount, as shown in the section Mini wall mount.
- ▶ Mounting with a gooseneck tube, as shown in the section Wall mounting with gooseneck tube.
- ▶ Mounting with a wall box, as shown in the section Wall box mounting.

5.4.1 Mini wall mount

Items Needed

- ▶ Dome camera
- ▶ Mini wall mount and other equipped items (optional accessory)
- ▶ Screws and screw anchors (not supplied)
- ▶ Indoor tube adaptor for the Siqua MSD620 (optional accessory)
- ▶ Waterproof boot (supplied with the indoor tube adaptor)

Tools Needed

- ▶ Drill
- ▶ Screwdriver

» To mount the dome with the mini wall mount

1. Make a cable entry hole in the wall to recess the cables.
2. Thread the cables through the mini wall mount and fix the wall mount on the wall with proper screws and screw anchors.
3. Attach the waterproof boot to the mini wall mount.
4. Thread the cables through the indoor tube adaptor and lock it to the mini wall mount with the supplied screws and washers.
5. At this point, the dome can be suspended from the mini wall mount using the safety wire.

Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.

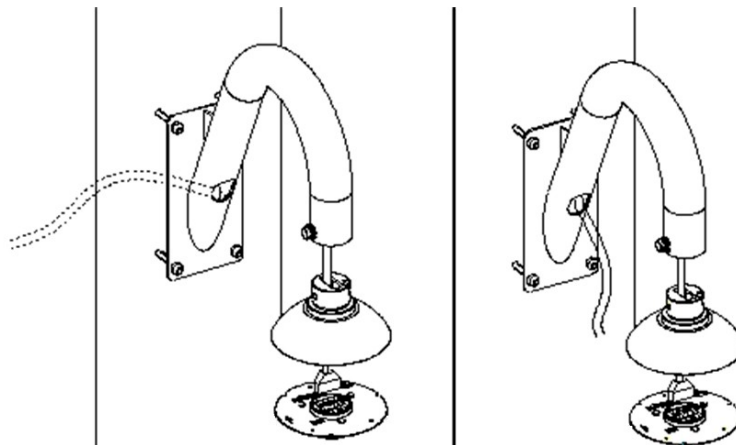
6. Attach the lock screw plate to the dome plate with the supplied screw, as depicted in the section, Ceiling mounting with a straight tube.
7. Adjust the waterproof boot to the junction of the mini wall mount and the indoor tube adaptor.
8. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Mini wall mount and access plate

5.4.2 Wall mounting with gooseneck tube

The following figure shows how cables run through the tube.



Gooseneck with recessed (left) and exposed (right) cabling

Items Needed

- ▶ Dome camera
- ▶ Gooseneck tube and other equipped items (optional accessory)
- ▶ Waterproof boot (standard accessory with the indoor tube adaptor)
- ▶ Screws and screw anchors (not supplied)
- ▶ Indoor tube adaptor for the Sigura MSD620 (optional accessory)

Tools Needed

- ▶ Drill
- ▶ Screwdriver

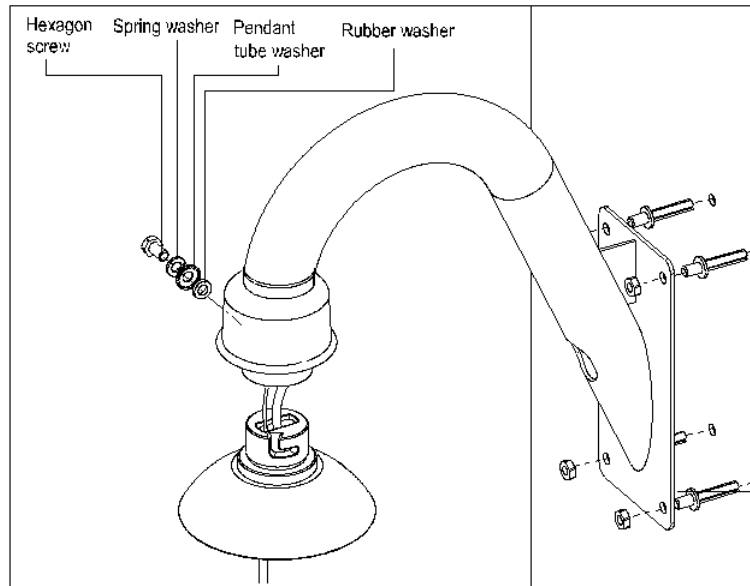
» To mount the dome with the gooseneck tube

1. Make a cable entry hole on the wall to recess the cables.
2. Fix the gooseneck tube to the wall with proper screws and screw anchors.
3. Attach the waterproof boot to the gooseneck tube.
4. Thread the cables through the gooseneck tube and the indoor tube adaptor.

Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.

5. Attach the lock screw plate to the back of the dome with supplied screw, as depicted in the section, Ceiling mounting with a straight tube.

6. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.
7. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Wall mounting: gooseneck tube + indoor tube adaptor + waterproof boot

5.4.3 Wall box mounting

Items Needed

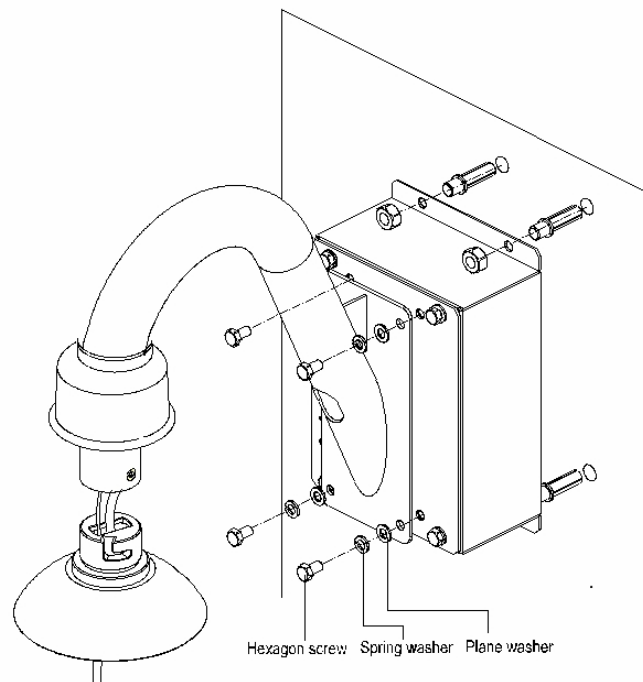
- ▶ Dome camera
- ▶ Wall box mount and other equipped items (optional accessory)
- ▶ Gooseneck tube (optional accessory)
- ▶ Screws and screw anchors (not supplied)
- ▶ Indoor tube adaptor for the Siqua MSD620 (optional accessory)
- ▶ Waterproof boot (supplied with the indoor tube adaptor)

Tools Needed

- ▶ Drill
- ▶ Screwdriver

▶ To mount the dome with the gooseneck tube and wall box

1. Fix the wall box to the wall with proper screws and screw anchors.
2. Fasten the gooseneck tube to the wall box with the supplied screws and washers.
3. Attach the waterproof boot to the gooseneck tube.
4. Thread the cables through the gooseneck tube and the indoor tube adaptor.
5. **Note:** After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.
6. Attach the lock screw plate to the back of the dome with the supplied screw, as depicted in the section, Ceiling mounting with a straight tube.
7. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.
8. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Wall box mounting: wall box mount + gooseneck tube + waterproof boot + indoor tube adaptor

5.5 Corner Mount

With the corner standard mounting plate and gooseneck tube/mini wall mount, the Sigura MSD620 can be mounted onto the corner or a wall.

Items Needed

- ▶ Dome camera
- ▶ Gooseneck tube/mini wall mount and other equipped items (optional accessory)
- ▶ Corner standard mounting plate (optional accessory)
- ▶ Indoor tube adaptor for the Sigura MSD620 (optional accessory)
- ▶ Waterproof boot (supplied with the indoor tube adaptor)
- ▶ Screws and screw anchors for fixing the corner standard mounting plate (not supplied)

Tools Needed

- ▶ Drill
- ▶ Screwdriver

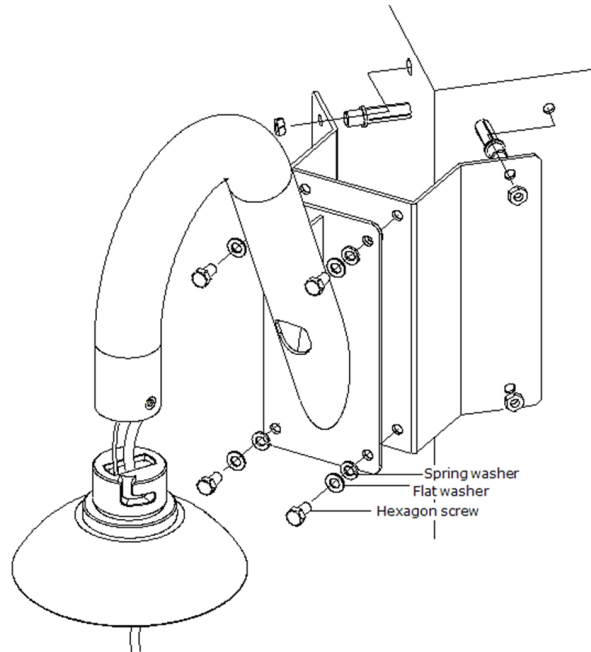
▶ To mount the dome camera with the corner standard mounting plate and gooseneck tube/mini wall mount

1. Make a cable entry hole on the wall to recess the cables. Otherwise, cables can be threaded through the cable entry hole on the tube.
2. Fix the corner standard mounting plate on a corner with the proper screws and screw anchors.
3. Attach the gooseneck tube/mini wall mount to the fixed mounting plate with the supplied screws and washers.
4. Attach the waterproof boot to the gooseneck tube/mini wall mount.
5. Attach the indoor tube adaptor to the gooseneck tube/mini wall mount.
6. Thread the cables through the gooseneck tube/mini wall mount and the indoor tube adaptor.

Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.

7. Attach the fixing plate to the back of the dome with the supplied screw.

8. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.
9. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Corner wall mounting: corner standard mounting plate + gooseneck tube/mini wall mount + indoor tube adaptor + waterproof boot

5.6 Pole Mount

There are two ways to mount the Siqura HSD622 and HSD626 cameras on a pole:

- ▶ Using a thin/wide direct mount as described in the section Pole thin/wide direct mounting.
- ▶ Using a thin/wide box mount as described in the section Pole thin/wide box mounting.

5.6.1 Pole thin/wide direct mounting

The dome can be installed to a pole with a thin/wide direct mounting accessory and a gooseneck tube.

Items Needed

- ▶ Dome camera
- ▶ Gooseneck tube and other equipped items (optional accessory)
- ▶ Indoor tube adaptor for the Siqura MSD620 (optional accessory)
- ▶ Waterproof boot (supplied with the indoor tube adaptor)
- ▶ Pole thin direct mounting (optional accessory)
- ▶ Stainless steel straps (optional accessory)

Tools Needed

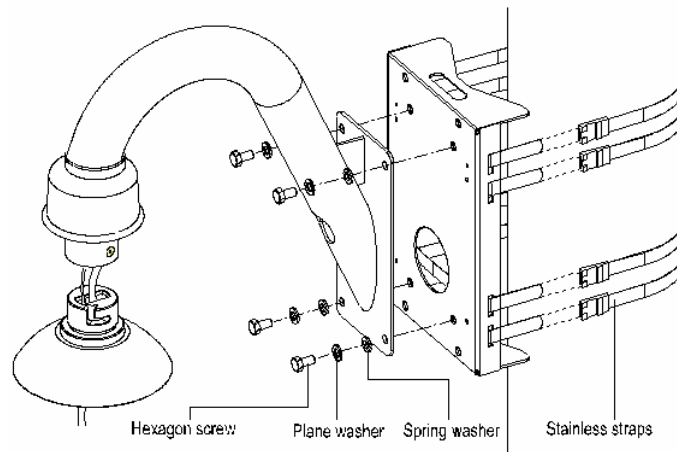
- ▶ Stainless strap cutter (optional accessory)
- ▶ Screwdriver

▶ To mount the dome camera with the pole thin direct mounting and gooseneck

1. Fasten the pole thin direct mounting on a pole with equipped stainless steel straps.
2. Fix the gooseneck tube to the pole direct mounting with the supplied screws and washers.
3. Attach the waterproof boot to the gooseneck tube.
4. Thread the cables through the gooseneck tube and the indoor tube adaptor.

Note: After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.

5. Attach the lock screw plate to the back of the dome with the supplied screw, as depicted in the section, Ceiling mounting with a straight tube.
6. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.
7. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Pole direct mounting: pole thin direct mounting + gooseneck tube + indoor tube adaptor + waterproof boot

5.6.2 Pole thin/wide box mounting

Items Needed

- ▶ Dome camera
- ▶ Gooseneck tube and other equipped items (optional accessory)
- ▶ Indoor tube adaptor for the Sigura MSD620 (optional accessory)
- ▶ Waterproof boot (supplied with the indoor tube adaptor)
- ▶ Pole wide box (optional accessory)
- ▶ Stainless steel straps (optional accessory)

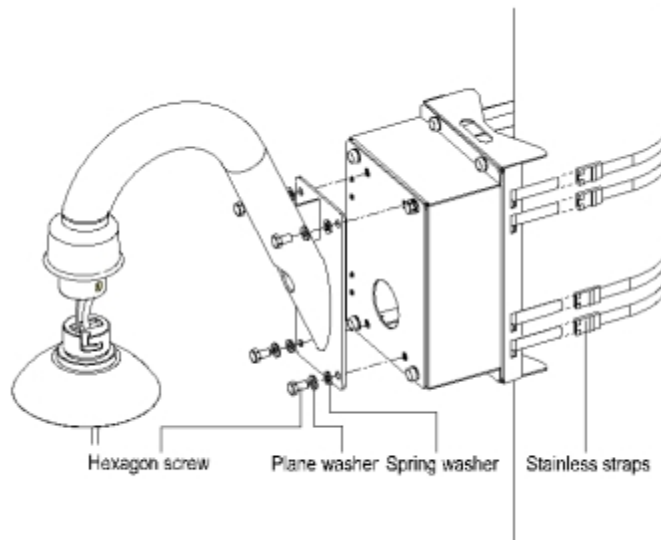
Tools Needed

- ▶ Stainless strap cutter
- ▶ Screwdriver

» To mount the dome camera with the pole box and gooseneck tube

1. Fasten the pole wide box on a pole with equipped stainless steel straps.
2. Fix the gooseneck tube on the pole box with the supplied screws and washers.
3. Attach the waterproof boot to the gooseneck tube.
4. Thread the cables through the gooseneck tube and the indoor tube adaptor.
5. **Note:** After threading the cables, block the cable entry hole with the supplied sponge(s) to prevent insects from entering the tube.
6. Attach the lock screw plate to the back of the dome with the supplied screw, as depicted in the section, Ceiling mounting with a straight tube.
7. Adjust the waterproof boot to the junction of the gooseneck tube and the indoor tube adaptor.

8. Connect the cables to the dome camera. Then attach the dome to the indoor tube adaptor and fasten them together with the supplied screw.



Pole box mounting: pole wide box + gooseneck tube + indoor tube adaptor + waterproof boot

6 System Integration

The Siquira MSD620 dome camera can be integrated into other suppliers' surveillance systems in two ways:

- ▶ Via the Open Streaming Architecture (OSA) application programming interface (API). For more information see the *Siquira PTZ Camera Codec Programming Interface - Interface Specification* or contact your supplier for details.
- ▶ Via serial tunneling using the Pelco D protocol. For Pelco D, set both the UART gap timeout and the UART max latency to 7. This ensures efficient and accurate transmission of the commands. Other serial servers will likely use different terms for these settings. The Siquira MSD620's default baud rate is set to 9600. Ensure that your control keyboard uses a compatible baud rate. The factory set ID number is 1 and you must not change this setting. For applications that require a unique RS-485 ID, please contact Siquira for assistance.

Note: Ensure that the configuration is correct when using a serial server device, such as an Siquira S-44 D data port, to send PTZ commands via a network.

Appendix A: Camera Accessories

Before installing the camera, compare your accessories to those listed in this section and ensure that you have all the parts you need for your installation.

Important: If anything is missing, do not install the dome. Contact your supplier for assistance.

In This Chapter

Siqura MSD620 Accessories.....	31
Mounting Accessories	32

Siqura MSD620 Accessories



DC20C Transparent Vandal-Proof Cover or DC20S Smoke Cover

Diameter: 137 mm (5.4 in.)



PA01 Power Adapter (optional)

- ▶ Input: 100~115VAC/Output: 24VAC 72VA (US)

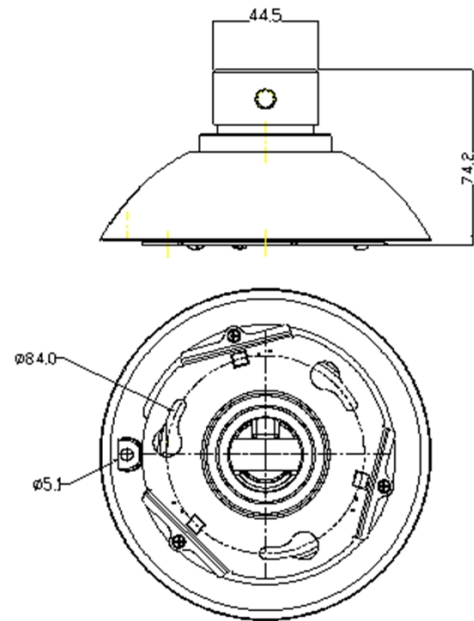
OR

- ▶ Input: 220~230VAC/Output: 24VAC 72VA (EU/UK)

Note: When wiring, make sure the G/Y wire (Ground) is inserted into the mid-pin of the terminal block

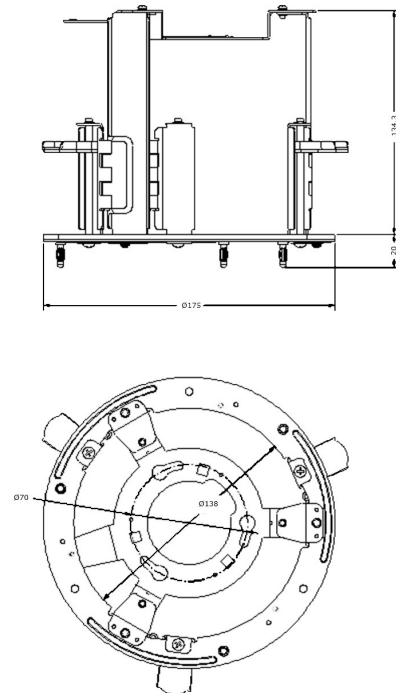
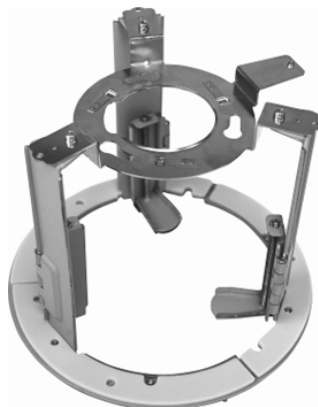
WM02/HD Indoor Tube Adaptor

White; Diameter: 140 mm (5.5 in.); Height : 74 mm (2.9 in.); 0.3 kg (0.7 lbs) Package components: adaptor, TORX, M5*8 screw x 1, M5*8 security screw x 1, M3*6 screw x1



CM04A/MD Flush Mount

For in-ceiling installation. Height: 160 mm (6.3 in.); Diameter: 180 mm (7.1 in.); 0.5 kg (1.1 lbs)



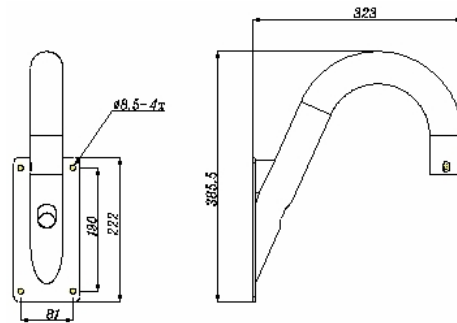
Mounting Accessories

All mounting accessories are optional. To secure the camera to the tube or wall mount, all tube mounts and the mini wall mount are supplied with the following.

- ▶ Cup washer (1)
- ▶ 8mm spring washer (1)
- ▶ 8mm rubber gasket (1)
- ▶ M8*12 screw (1)
- ▶ Waterproof boot (1)

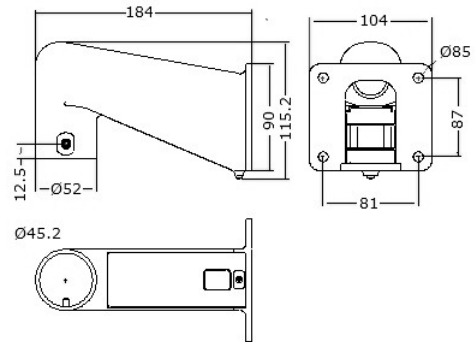
WM03A / Gooseneck Tube

White Color; Iron, 298×385 mm (11.73×15.56 in.); 2.1 kg (4.6 lbs).
(Gasket plate and cable gland for IP66 rated installations included)



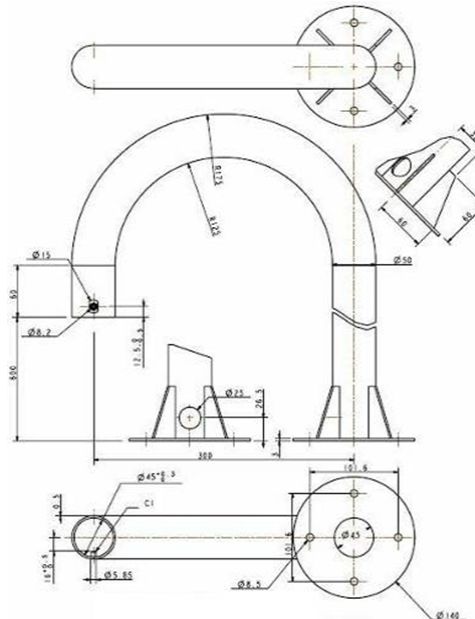
WM01A / Mini Wall Mount

White; 184×104×115.2 mm (7.24×4.09×4.54 in.); 0.6 kg (1.2 lbs).
(Gasket plate and cable gland for IP66 rated installations included)



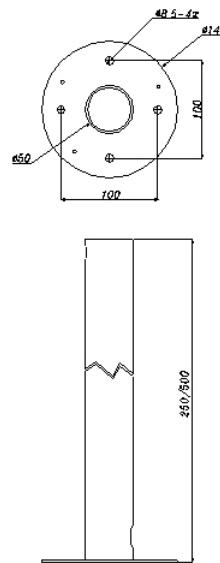
PM05 / Swan-neck Mount

White, Iron, Height: 250/500 mm (9.8/19.7 in.),
Diameter: 50 mm (2 in.).
1 kg (2.2 lbs) / 1.8 kg (4 lbs).



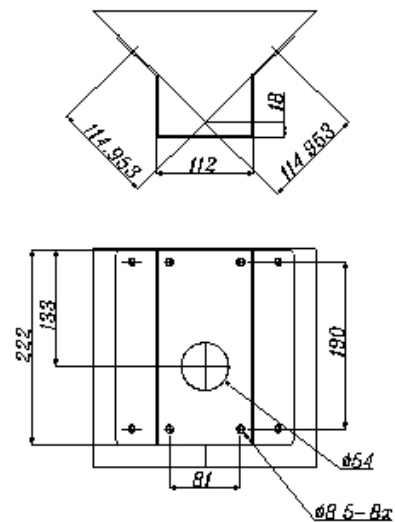
CM01 (250mm)/CM02 (500mm) / Straight Tube

White, Iron, Height: 250/500 mm (9.8/19.7 in.),
Diameter: 50 mm (2 in.)
1 kg (2.2 lbs) / 1.8 kg (4 lbs).



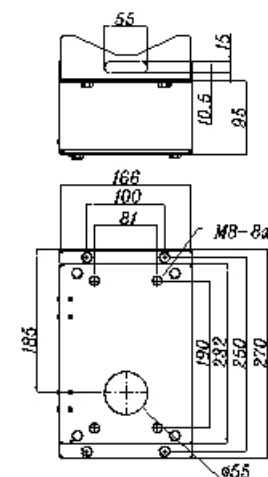
WM05 / Corner Standard Mounting Plate

White, 222×204×117 mm (8.7×8×4.6 in.); 2 kg (4.4 lbs); Supplied with 8mm washer ×4, spring washer×4, M8*16 screw×4, M8 nut×4.



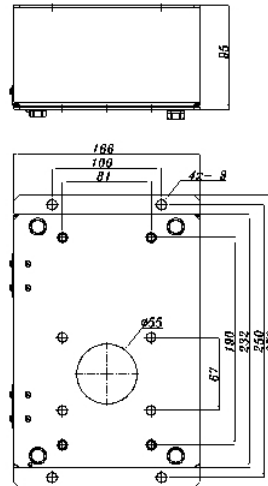
PM04 / Pole Wide Box

White/Ivory, 270×166×155 mm (10.6×6.5×6.1 in.);
3.2 kg (7.1 lbs); Supplied with M8*16 screw×4,
washer×4, spring washer×4, stainless steel
straps×4.



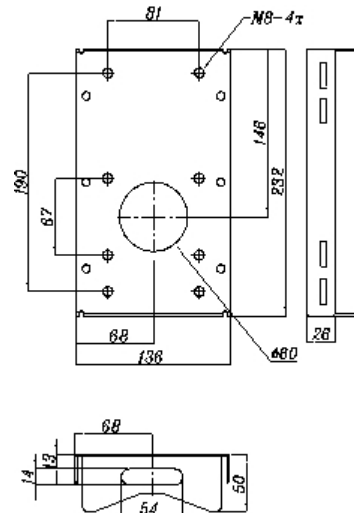
WM06 / Wall Box Mounting

Ivory, 270(L)×166(W)×95(D) (10.6×6.5×3.7 in.); 2.2 kg (4.84 lbs); Supplied with M8*16 screw×4, washer×4, spring washer×4



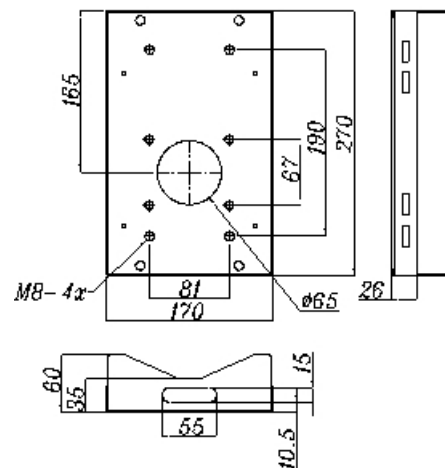
PM01 / Pole Thin Direct Mounting

White/Ivory, 232×136×60 mm (9.1×5.4×2.4 in.); Diameter: 112~140 mm (4.4~5.5 in.); 0.7 kg (1.6 lbs); Supplied with stainless steel straps×4, M8*16 screw×4, washer×4.



PM02 / Pole Wide Direct Mounting

White/Ivory, 270×170×60 mm (10.6×6.7×2.4 in.); Diameter: 112~130 mm (4.4~5 in.); 1 kg (2.2 lbs); Supplied with stainless steel straps×4, M8*16 screw×4, washer×4.



ST01 / Stainless Steel Straps

For fixing Pole Direct Mounting/ Pole Box on the pole.
Length: 700 mm (27.5 in.); Width: 0.63"; 0.02 kg (0.04 lbs)



ST02 / Stainless Strap Cutter

For tension, cut and crimp stainless steel straps. 1.4 kg (3.1 lbs)
Suitable for straps width: 1/2", 5/8", 3/4"



Appendix B: Technical Specifications

Item		MSD620
CAMERA		
CCD Sensor		1/4" Exview CCD
Optical Zoom		12x
Digital Zoom		12x
Effective Pixels	NTSC	380k
	PAL	440k
Horizontal Resolution		540 TVL
Electronic Shutter		1/1~1/10 sec.
Synchronization		Internal
Video Output		1.0 Vpp/75Ω, BNC (gold-plated center pin)
S/N Ratio		>50 dB (AGC off)
Minimum Illumination		1 lux, 0.1 lux (B/W)
Focal Length		3.8~45.6mm
Focus Mode		Auto/Manual
White Balance		Auto/Manual/Indoor
Iris Control		Auto/Manual
AGC Control		Auto/Manual
Backlight Compensation		On/Off
VIDEO		
Number of video streams		2x H.264, 2x MPEG-4, MPEG-2, and/or MJPEG
Frame rate		1-30fps
Compression algorithm		H.264 BP (ISO/IEC 14496-10), MJPEG, MPEG-4 SP layer 5, (ISO/IEC 14496-2), MPEG-2 (ISO/IEC 13818-2)
RESOLUTION		
Type of streaming		UDP/IP (multi- and/or unicast)
Number of output streams		Up to 20
Encoding latency		<130 ms
GOP structure		I, IP selectable
Output data rate		Up to 20 Mb/s (CBR or VBR selectable/user profiles)
Video settings		User profiles, contrast, brightness, color saturation, hue, sharpness.
On Screen Display (OSD)		3x text lines, (configurable: position, color, border/ outline color, font size), 1x image in BMP, GIF, or JPEG format (configurable: position, scaling.)

Live view encoder		HTTP, FTP pull
OPERATION		
Built-in Protocol		Pelco D
Pan Travel		360° continuous
Tilt Travel		0° ~ 180°
Manual Speed		0.5° ~ 55°/s
Presets		256
Preset Accuracy	Pan	0.225°
	Tilt	
Preset Speed	Pan	5 ~ 300°/s
	Tilt	
Cruise		8
Sequence		8
Auto Pan		4
Privacy Mask		16
Proportional Pan & Tilt		On/Off
Resume after power loss		Yes
Zone Title		16
Home Function		Preset, Sequence, Auto pan, Cruise
Auto Flip		Digital/Mechanical/Off
AUDIO		
Two-way audio		Line out, Line in/mic in (jack Ø3.5 mm)
FUNCTIONS		
Motion detection		Yes (user-defined masking)
Day/Night: IR Cut Filter		On/Off
Wide dynamic range		On/Off
PTZ coordinate data		Via API or Pelco-D (set/get)
CONTACTS		
Alarm Input		8
Alarm Output		1
Number of streams		2x 3 (multi- and/or unicast)
Alarm Reaction		Preset, Sequence, Auto pan, Cruise
NETWORK		
Interface		RJ-45 or SFP (modules not included)
Protocol		H.264 BP, MPEG-4 ES, MPEG-2, (M)JPEG, RTP, RTCP, RTSP, TCP, UDP, IP, DHCP, IGMPv2, (S)NTP, MX/IP, HTTP, SNMPv2, FTP, TelNet, DiffServ, SAP, UPnP, 802.1x
GENERAL		
Operating Temperature		0°C to +40°C (+32°F to +104°F)
Regulatory		CE, FCC, RoHS
Dimension		Ø133 x 173 mm (Ø5.2 x 6.8 in.)

Weight	1.2 kg (2.7 lbs.)
POWER	
Power Source	19.2- 28.8 VAC, 24 VAC nominal
Power Consumption	21W

Note: Weight and dimensions are approximate. All specifications are subject to change without notice.



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