

# C6650-10-Z33

1T 500万智能球型摄像机



## 产品特性

- ▶ 支持1 TOPS算力;
- ▶ 支持人群态势分析、机非人、车辆、车辆事件检测、交通数据统计;
- ▶ 支持背光自适应、透雾自适应、速度自适应;
- ▶ 采用1/2.7" CMOS;
- ▶ 软件定义, 支持算法在线加载与升级;
- ▶ 120dB超级宽动态, 强反差场景还原真实细节;

华为好望客户服务  
微信服务号



华为机器视觉  
微信订阅号



## 技术参数

### 产品型号 C6650-10-Z33

#### 主要参数

主控	芯片	Hi3516DV300
	算力	1 TOPS
	内存	DDR3 1.0 GB
	Flash	SPI NAND FLASH 512.0 MB
	最大支持扩展	提供MicroSD卡插槽，支持MicroSDHC/MicroSDXC，支持最大容量256GB内存卡
摄像	镜头焦距	5-165mm
	最大光圈	F1.6(W端)-F4.4(T端)
	图像传感器	1/2.7" CMOS,5MP 2560(H)*1920(V)
	镜头光圈类型	精准光圈(DC-Iris+Hall)
	镜头视角	水平:2.2°(T端)~54.4°(W端);垂直:1.7°(T端)~41.1°(W端)
	红外灯补光距离	200m
	数字变倍	支持
内置云台	云台旋转角度	水平0°~360° 垂直-15°~90°
	云台水平速度	键控速度: 0.1~160°/s 预置位速度: 240°/s
	云台垂直速度	键控速度: 0.1~120°/s 预置位速度: 200°/s
	预置位	支持256个(含1个看守位)
	扫描模式	花样扫描,限位扫描,水平扫描,垂直扫描,随机扫描,帧扫描,全景扫描

#### 智能

车辆	车牌识别(中国区域)	中国大陆牌识别
	车辆分析	车身颜色检测,车型检测
其他智能	人群态势分析	排队长度统计,区域人数统计,人流量统计
	非机动车流量统计	机非人检测
	车辆事件检测	机占非检测,非占机检测,违法停车检测,逆行/倒车检测,违停检测
	虚焦检测	支持

#### 开放生态

算法开放	SDC OS	支持
	HoloSens商城	支持算法动态加载
数据开放	数据开放	SDK(私有协议),Rest API(私有协议),GA/T 1400,DB3311,GB/T 28181(2011, 2016 协议规格)

#### 图像

编解码	视频编码格式	MJPEG/H.264/H.265
	视频编码路数	三码流
	智能编码	Extra265/264

	视频帧率	30/25fps可设置, 默认值25fps
图像AI	场景自适应	背光自适应,透雾自适应,速度自适应
图像ISP	最低照度	彩色:0.005Lux(F1.2,AGC ON,1/30快门),黑白:0.0005Lux(F1.2,AGC ON,1/30快门)
	日夜模式	支持; 自动(ICR)/彩色/黑白 默认自动 灵敏度高、中、低 默认高 图像触发/内部触发
	宽动态	120dB
	白平衡	自动/自动跟踪/手动/一键触发
	强光抑制	支持
	数字降噪	2D/3D降噪
	算法透雾	支持
	视频防抖	支持功能; 不支持灵敏度;

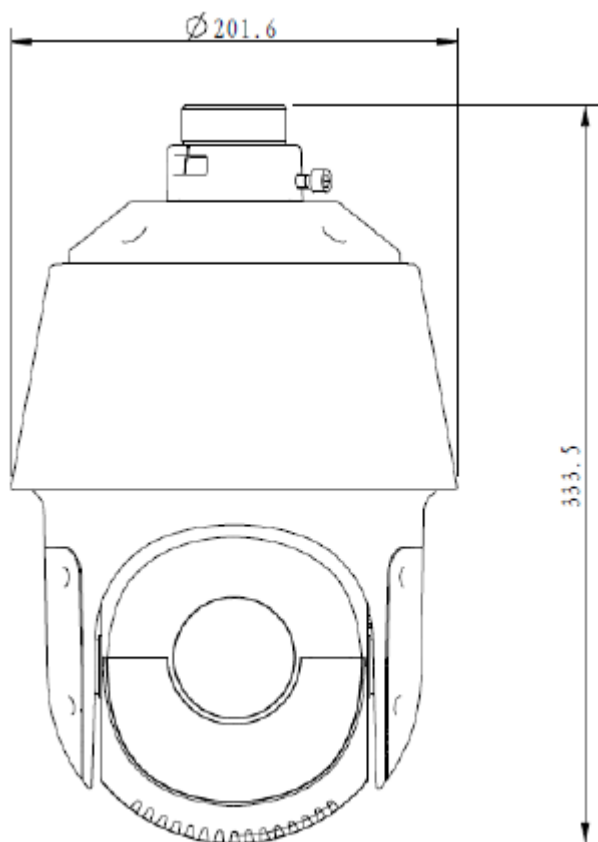
组网		
网络传输	IPV4支持的协议	TCP,UDP,IPv4,IPv6,DHCP,DHCPv6,DNS,ICMP,ICMPv6,IGMP,HTTPS,FTP,SFTP,RTP,RTSP,RTCP,SIP,ARP,SSL,NTP,SNMP(V1/V2/V3),802.1x,QoS,DDNS,SMTP,PPPOE
	IPV6支持的协议	HTTPS, RTP, RTCP, RTSP

安全		
数据安全	媒体安全	支持SDK码流AES256加密 支持SD卡上视频和图片存储加密
业务安全	用户权限	分3级:管理员、高级操作员、普通操作员
	安全模式	用户名和密码认证, 支持802.1x, HTTPS数字证书
	安全启动	支持
	安全/加密入侵检测	支持
安全认证	GB35114	支持

接口	
存储接口	提供MicroSD卡插槽, 支持MicroSDHC/MicroSDXC, 支持最大容量256GB内存卡
报警接口	2路输入/1路输出
网络接口	1个RJ45 10M/100M以太网口
音频接口	支持(1路LINE IN或1路外置MIC),支持(1路LINE OUT)

一般规格	
电源类型	AC24V,PoE (IEEE 802.3at)
电源功耗	最大功耗:22W,典型功耗:6.5W
工作温度	-30°C~60°C(补光灯不开启) -30°C~40°C(补光灯开启)
工作湿度	5%~95%(无冷凝)
防雷防浪涌	6kV
防护等级	IP66
重量	整机重量 3.7kg;包装重量 4.76kg
尺寸	整机尺寸 φ202mm×309mm;包装尺寸 390mm×290mm×280mm

## 尺寸



## 推荐配件



ACC3651



ACC3631





ACC3621



DTS-10C



## 商标声明

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**华为技术有限公司**

深圳市龙岗区坂田华为基地

电话: (0755) 28780808

邮编: 518129

[www.huawei.com](http://www.huawei.com)

# 6-Inch PTZ Dome Software-Defined Camera

## 6 寸球型软件定义摄像机

### Quick Start Guide

#### 快速入门

Default Login IP 默认 IP 地址	User Name 用户名
192.168.0.120	admin



HoloSens Information Platform  
Technical Support  
信息平台技术支持



31500CCB

Issue: 05  
版本: 05

The manual may come in different versions, which does not affect your usage. 该手册存在版本升级情况, 您收到的快速入门版本不同, 属于正常现象。

### Packing List and Qualification Card

#### 装箱清单和合格证

Component 物品	PCS	Component 物品	PCS
Camera 网络摄像机	1	Connector 转接头	1
Quick Start Guide 快速入门	1	Crimping terminal (0.75 mm <sup>2</sup> and 1.0 mm <sup>2</sup> ) 压线端子 (支持0.75mm <sup>2</sup> 和1.0mm <sup>2</sup> 的线缆)	2
Terminal 电源端子	1	FC Optical Adapter (Provided only by the camera that supports the fiber function) FC 光纤适配器 (仅支持光纤功能的摄像机提供)	1
PVC insulation tape 绝缘胶带	1	2.5 mm flat-head screwdriver 一字螺丝刀 (刀头宽度为2.5mm)	1
Waterproofing tape 防水胶带	1	L-shaped hex key 内六角L型扳手	1



#### NOTE/ 说明

The packing list for some countries or regions does not contain the waterproof tape, insulation tape, flat-head screwdriver, and hex key.

部分国家或地区的装箱清单内不包含防水胶带、绝缘胶带、一字螺丝刀、内六角扳手。

#### Additional Guides Available/ 资料获取路径

To obtain the latest documents, including the *Product Documentation* and *FOSS License Information*, visit <http://support.huawei.com/enterprise> and enter the camera model to search for related documents.

You can also log in to <http://support.huawei.com/enterprise> or scan the QR code using your mobile phone to download the Huawei Enterprise Technical Support app. Then start this app and choose **Products > Intelligent Vision** to obtain the latest documents.

请登录 <http://support.huawei.com/enterprise> 网站, 输入摄像机型号进行搜索, 获取最新资料, 包括《产品文档》和《开源软件使用声明》等。

您也可以用手机登录 <http://support.huawei.com/enterprise> 网站或者扫描右侧二维码, 下载“华为企业服务 APP”, 选择“产品 > 机器视觉”获取最新资料。



HiKnow  
Technical Support App  
华为企业服务 App

#### 电子电气有毒有害物质申明

部件名称	有毒有害物质或元素					
	Pb 铅	Hg 汞	Cd 镉	Cr6+ 六价铬	PBB 多溴联苯	PBDE 多溴二苯醚
结构件	X	○	○	○	○	○
单板/电路模块	X	○	○	○	○	○
线缆和线缆组件	X	○	○	○	○	○
纸质配件	○	○	○	○	○	○

本表格依据SJ/T 11364的规定编制。

○: 表示该有害物质在该部件所有均质材料中的含量在GB/T 26572规定的限量要求以下。

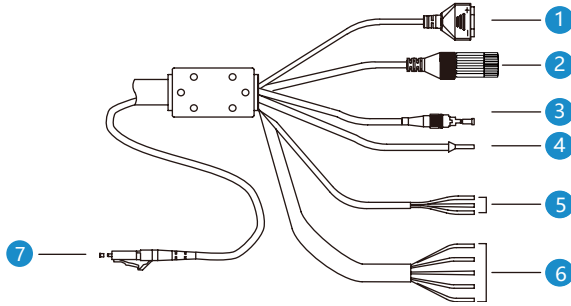
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。



This product has an environment friendly use period (EFUP) of 20 years. Some replaceable parts have their own EFUP labels. The EFUP is suitable only for products that work in conditions specified in the product manual.

本产品的环保使用期限为20年, 标识如左图所示。某些可更换的零部件会有一个不同的环保使用期限贴在其产品上。此环保使用期限只适用于产品是在产品手册中所规定的条件下工作。

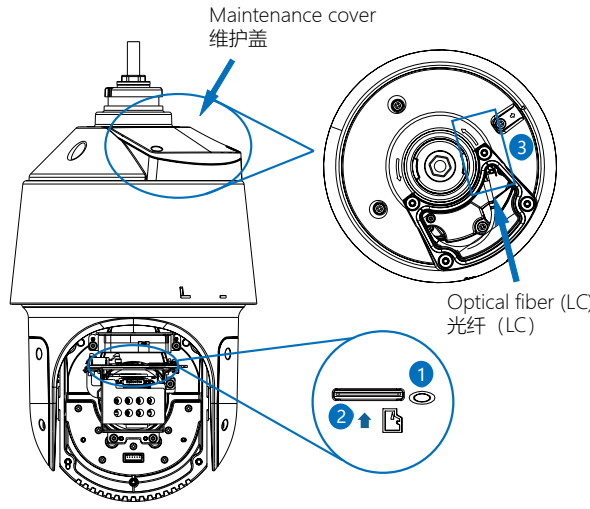
針對中國臺灣, 限制物質含有情況標示聲明書, 請登錄 <http://support.huawei.com/enterprise> 網站, 輸入對應的攝像機型號進行搜索, 在對應的產品文檔下選擇“安裝指南 > 附錄 > 限制物質含有情況標示聲明書”查看。



**NOTE/ 说明**

- Only the camera that supports the fiber function provides the optical port. 仅支持光纤功能的摄像机才有光纤接口。
- The appearance, components and ports vary depending on camera models. The figures in this document are for reference only. 不同款型设备的外观、结构、接口存在差异，本文档示意图仅供参考，请以实物为准。
- You can log in to <http://e.huawei.com>, search for the desire device model, and view the datasheet to obtain the device specifications. 您可以登录 <http://e.huawei.com>，搜索对应款型，查看相应的彩页，获取设备详细技术参数。

NO. 序号	Item 名称	Description 说明
1	POWER	Power input port. 电源输入接口。
2	LAN/PoE	Network port. 网络接口。
3/7	SFP_RX/SFP_TX	Fiber-optic port. This port supports FC connection to an external fiber-optic connection, or LC connection to an internal fiber-optic connection. During single-fiber bidirectional transmission, ensure that the SFP optical module (LC interface) and the optical fiber adapter (FC interface) are both configured with the same type of interface (either SFP_RX or SFP_TX). 光纤接口（外部光纤为FC口，内部光纤为LC口）。当采用单纤双向传输时，请确保插入SFP光模块的光纤（LC口）和连接光纤适配器的光纤（FC口）为同一类型（即同为SFP_RX或者SFP_TX）。
4	GND	Ground port of a camera. 设备接地接口。
5	AUDIO IN/AUDIO OUT/AUDIO_GND	Audio input/output port and audio ground port. AUDIO IN/AUDIO OUT为音频输入/输出接口。AUDIO_GND为音频接地接口。
6	ALARMOUT/ALARM_REF	Alarm output and reference ports. The ports work together to form the alarm output. The rated voltage of the alarm output device is less than or equal to 30 V DC or 125 V AC. The rated current is less than or equal to 200 mA. 告警输出接口。ALARM_OUT和ALARM_REF组成告警输出。告警输出所驱动设备的额定电压不高于DC 30V或AC 125V，且额定电流均不大于200mA。
	ALARM_GND	Alarm input ground port. 告警输入接地接口。
	ALARM_INn	Alarm input port. ALARM_IN0, ALARM_IN1. Each one connects to the ALARM_GND connection to form a single alarm input. 告警输入接口。n为0~1之间的整数，每条告警线与ALARM_GND组成一组告警输入。



**NOTE/ 说明**

Different models of PTZ dome cameras have different appearances. Only the camera that supports the fiber function provides the SFP optical module slot. Here, a camera that supports the fiber function is used as an example. 不同款型球机外观结构有差异，请以实物为准。仅支持光纤功能的摄像机具有光模块维护窗。此处以支持光纤功能的摄像机为例。

NO. 序号	Operation 操作	Description 说明
1	Use the Phillips screwdriver to remove the camera bottom cover. Then, you can see the reset button and SD card slot. 使用十字螺丝刀将球机后盖卸下，即可看到重置键和SD卡槽。	Reset button. To restart the device, hold down the reset button (less than 3s). To restore the device to factory settings, hold down the reset button for at least 5s while the device is running. Restoring the factory configuration will result in the loss of the user's account information and some of the configuration information. Please exercise caution when performing this operation. 重置按钮。运行时按住Reset键短于3秒重启设备，运行时按住RESET键不短于5秒后恢复出厂配置。恢复出厂配置将会导致用户的帐号信息以及部分配置信息丢失，请慎重操作。
2		SD card slot. This device supports class 10 or higher microSD card. To replace a microSD card, the device must be powered off. Otherwise, system exception may occur. When a microSD card is used for the first time, log in to the web client of the device and format the microSD card. For details, see the Configuration Guide. SD卡卡槽，支持Micro SD卡（Class 10及以上）。请在设备断电的情况下插拔SD卡，否则会造成系统异常。首次使用时，请登录设备Web客户端，格式化SD卡，操作方法请参见《配置指南》。
3	Use the Phillips screwdriver to remove the maintenance cover of the PTZ dome camera to access the SFP optical modules. 使用十字螺丝刀将球机维护盖卸下，即可看到SFP光模块插槽。	SFP optical module port. This interface supports single-mode optical modules. Working wavelength:1310 nm or 1550 nm; transmission rate: FE or GE. SFP光模块接口。该接口支持单模光模块，工作波长在1310波段或者1550nm波段，速率为千兆或者百兆。

## Required Tools/ 准备安装工具

 Wiring terminals 接线端子	 Diagonal cutting pliers 斜口钳	 10 mm hammer drill (for pendant- or wall-mounted installation) 冲击钻, Φ10mm (吊顶和墙壁安装时使用)	 RJ-45 connector crimping tool 水晶头压线钳
 Marker 记号笔	 Measuring tape 钢卷尺	 Hammer (for pendant- or wall-mounted installation) 羊角锤 (吊顶和墙壁安装时使用)	 Waterproofing tape 防水胶带
 M8 socket wrench 套筒扳手 (M8)	 Wire stripper 剥线钳	 Hex key 内六角扳手	 PVC insulation tape 绝缘胶带
 #2 Phillips screwdriver 十字螺丝刀 (2#)	 Glass cement 玻璃胶	 2.5 mm flat-head screwdriver (for cable connection) 一字螺丝刀 (刀头宽度为2.5mm, 接线时使用)	

## Device Installation/ 设备安装

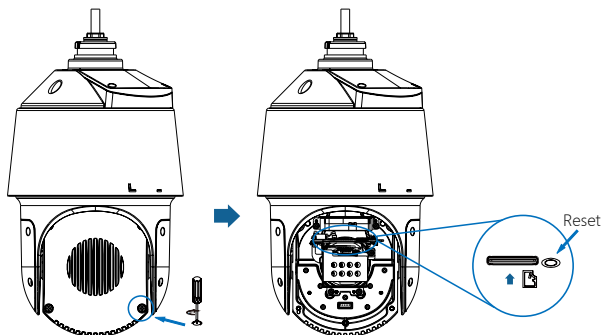
### A. SD Card Installation/ 安装 SD 卡

#### CAUTION/ 注意

- After the camera is unpacked, please install and power it on within 24 hours. Do not install the camera in rainy or windy and dusty days to prevent water or sand from getting into the device.  
打开包装后, 请24小时内完成安装上电; 避开雨天和风沙天操作, 因为内部进水和进沙会导致设备故障。
- Do not attempt to remove the PTZ dome camera yourself. Do not remove the protective film from lens before total installation is complete. The pole, wall, or ceiling for installing the device must bear at least four times the total weight of the mount and camera. Additionally, ensure that the installation environment is firm and secure. Also, nearby magnetic field interference needs to be avoided.  
禁止私自拆解摄像机, 安装完成前切勿撕下镜头保护膜。安装此设备的立杆、墙面、天花板等, 至少能够承受支架和摄像机总重的4倍, 并确保各安装环境的牢固、可靠。同时, 应避免摄像机附近存在磁场干扰。

Use the #2 Phillips screwdriver to remove the camera bottom cover, and insert the SD card.

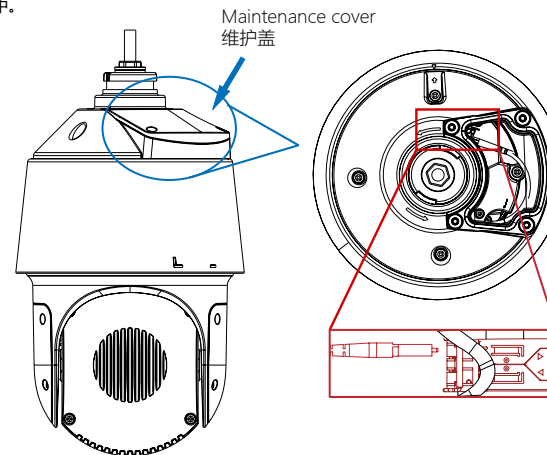
使用 #2 十字螺丝刀将球机后盖卸下, 插入 SD 卡。



### B. Install the optical module (Cameras that supports the fiber function) 安装光模块 (支持光纤功能的摄像机)

Use a Phillips screwdriver to loosen maintenance cover screws, and open the cover. Insert an SFP optical module into the SFP port and connect an optical fiber (LC) properly to the SFP optical module.

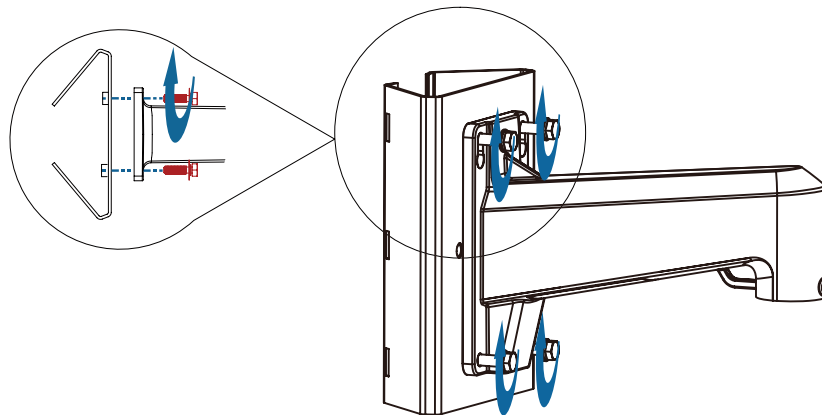
用十字螺丝刀拧开维护盖螺丝, 打开维护盖。将 SFP 光模块插入 SFP 接口, 并将光纤 (LC 口) 按收发标识插入 SFP 光模块对应的接口中。



### C. Pole-Mounted Installation/ 立杆抱装

- Align the screw holes on the wall mount with the screw holes on the pole mount, and fasten them together using the M8 screws. The tightening torque is 8 N·m.

将壁挂支架上的螺孔与抱装支架上相应的螺孔对齐, 拧紧 M8 螺钉。紧固力矩为 8N·m

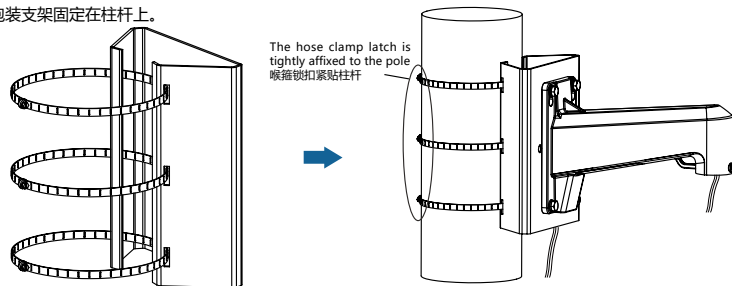


## Device Installation/ 设备安装

### C. Pole-Mounted Installation/ 立杆抱装

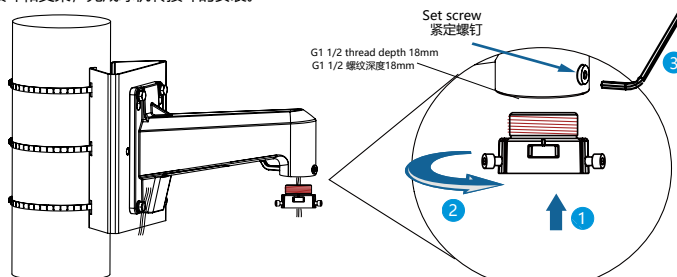
- 2** Open up the three hose clamps and thread them through the installation holes on the pole mount. Thread the cables that need to connect to the pigtail cables of the PTZ dome camera through the pole mount and wall mount. Then use the hose clamps to affix the pole mount to the pole.

将3个喉箍拧开，穿过抱装支架的安装孔。将需要与球机尾线对接的线缆穿过抱装支架和壁装支架。将喉箍环绕在柱杆上，拧紧喉箍，将抱装支架固定在柱杆上。



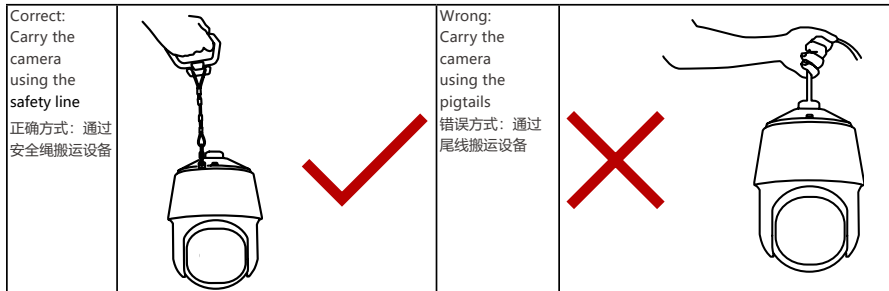
- 3** Align the adapter ring with the mount and screw it into the mount. Once it is screwed in, use the H3 hex key to tighten the set screw on the mount. Then, the adapter ring installation is complete.

将转接环对准支架，然后旋转转接环，将转接环安装到支架上，最后用的内六角扳手（H3规格）拧紧支架上的紧固螺钉，紧固转接环和支架，完成球机转接环的安装。



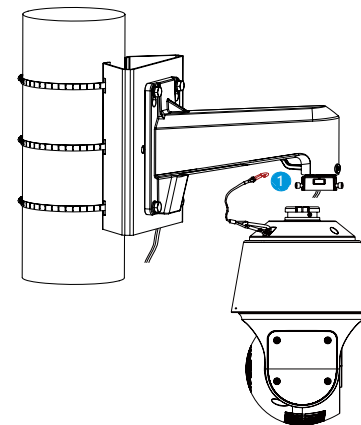
- 4** The PTZ dome camera is delivered with a safety line attached, to make it easier to pick up and carry the camera. You are advised to use the safety line, not the pigtails, to carry the camera.

由于球机比较重，球机安全绳在出货的时候已经安装在球机上，便于施工时搬运球机；设备搬运的时候建议通过安全绳搬运，不允许通过提尾线搬运设备。



- 5** Hook one end of the safety rope to the mounting ear on the mount.

将球机安全绳的卡扣挂到支架挂耳上。

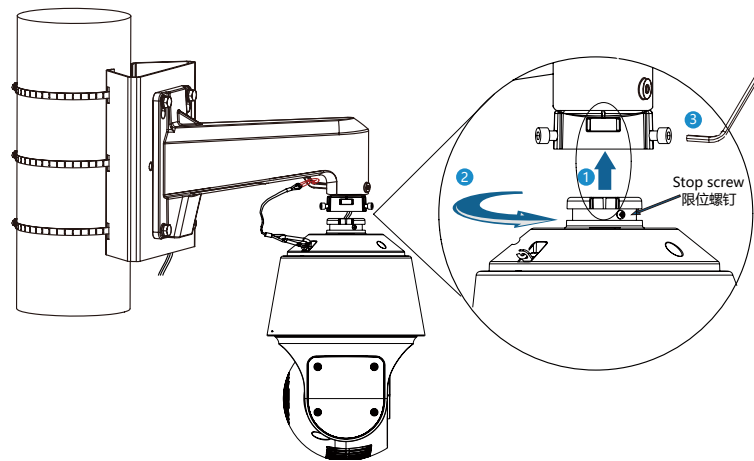


- 6** Connect the cables to the pigtails and waterproof and insulate the cables. For details, see the section "Cable Connection" and "Waterproofing and Insulation" on page 6. Tuck the cables into the mount. You can open the maintenance window below the mount and arrange the cables.

将线缆与球机的尾线连接，并对线缆接头处进行防水和绝缘处理，参见“连接线缆”和“防水绝缘处理”章节。并将线缆引入到支架中，可以打开支架下方的维护窗口进行整理。

- 7** First align the slot on the top of the PTZ dome camera with that on the adapter ring. Then mount the camera on the adapter ring and rotate the camera to the limit position following the indicative arrow. Last, use the H5 hex key to fasten the screws on the adapter ring to complete the camera installation.

首先将球机顶部的槽口对准转接环的槽口；然后把球机装到转接环上，根据箭头指示旋转球机到限位处；最后用内六角扳手（H5规格）固定转接环上的螺钉，完成球机的安装。



## Device Installation/ 设备安装

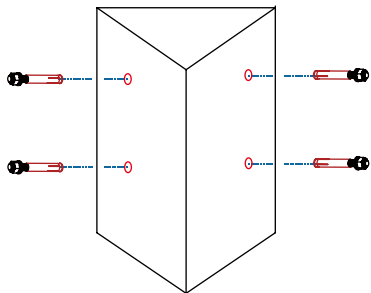
### D. Corner-Mounted Installation/ 角装

#### ⚠ CAUTION/ 注意

- Load bearing requirements: The wall must bear at least four times the total weight of the mount, housing, and camera  
承重要求: 要求墙体至少能够承受支架和摄像机总重的4倍。
- Wall requirements: When the tightening torque of the expansion bolt reaches 15 N·m, the expansion bolt will not be spinning and no cracks appear on the wall.  
墙体要求: 膨胀螺栓的紧固力矩达到15N·m时, 膨胀螺栓不会出现旋转失效, 墙面不会出现裂纹损坏。

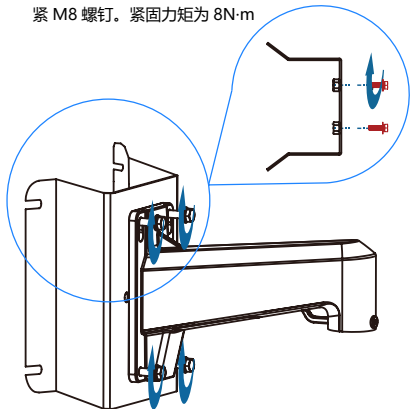
- 1 Place the mount in the desired installation position. Use a marker to mark where the installation screws go. Use a 10 mm bit to drill the holes with a depth of about 80 mm. Use a hammer to carefully drive the expansion bolts into the holes. Then, remove the washers, the spring washers, and the nuts from the expansion bolts.

将支架放置于安装位置, 使用记号笔绘制螺钉安装位置, 再选择直径为10mm的钻头, 钻取深约80mm的导孔。使用羊角锤将膨胀螺栓打入钻好的孔内。再将平垫、弹垫和螺母拧下。



- 2 Align the screw holes on the wall mount with the screw holes on the pole mount, and fasten them together using the M8 screws. The tightening torque is 8 N·m.

将角装支架上的螺孔与抱装支架上相应的螺孔对齐, 拧紧 M8 螺钉。紧固力矩为 8N·m



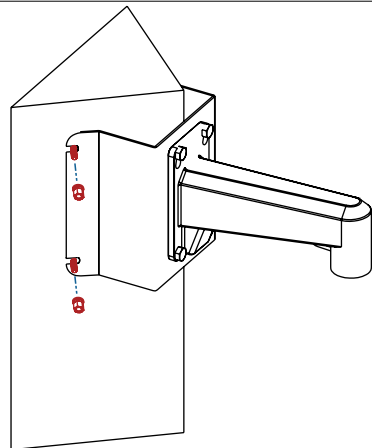
- 3 Remove washers, spring washers, and nuts from the expansion bolts and thread the cables through the wall mount. Put the four expansion bolts through the four screw holes at the bottom of the wall mount, replace the washers, spring washers, and nuts on the expansion bolts, and tighten the nuts.

拧下膨胀螺栓上的平垫、弹垫和螺母。将需要与球机尾线对接的线缆穿过壁装支架。将角装支架底座上的4个螺孔套在相应的膨胀螺栓上, 将平垫、弹垫和螺母套在膨胀螺栓上, 拧紧螺母。

#### 📖 NOTE/ 说明

For details about subsequent installation operations, see steps 3 through 7 in "Pole-Mounted Installation".

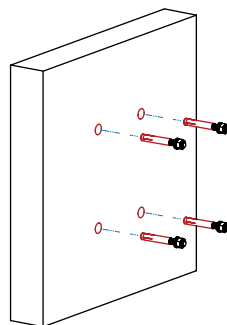
后续安装的具体过程请参见“立杆抱装中的步骤3到步骤7”。



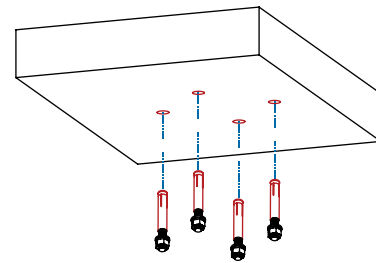
### E. Wall-Mounted and Pendant-Mounted Installations/ 壁挂或吊装

- 1 Place the mount in the desired installation position. Use a marker to mark the screw installation locations. Select a drill bit with a diameter of 10 mm to drill holes with a depth of about 80 mm. Use a claw hammer to install the expansion bolts into the holes. Then, screw off the flat washers, spring washers, and nuts from the expansion bolts.

将支架放置于安装位置, 使用记号笔绘制螺钉安装位置。再选择直径为10mm的钻头, 钻取深约80mm的导孔。使用羊角锤将膨胀螺栓打入钻好的孔内。再将平垫、弹垫和螺母拧下。



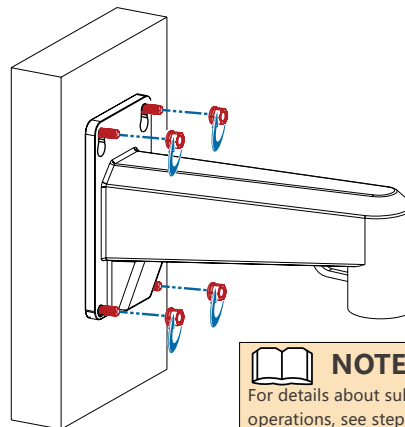
Wall-mounted installation/ 壁挂



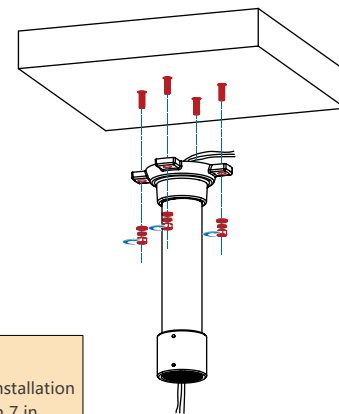
Pendant-mounted installation/ 吊装

- 2 Remove washers, spring washers, and nuts from the expansion bolts, and thread the cables through the mount. Put the four expansion bolts through the four screw holes on the base of the mount, replace the washers, spring washers, and nuts on the expansion bolts, and tighten the nuts.

拧下膨胀螺栓上的平垫、弹垫和螺母。将需要与球机尾线对接的线缆穿过壁装/ 吊装支架。将壁装/ 吊装支架底座上的4个螺孔套在相应的膨胀螺栓上, 将平垫、弹垫和螺母套在膨胀螺栓上, 拧紧螺母。



Wall-mounted installation/ 壁挂



Pendant-mounted installation/ 吊装

#### 📖 NOTE/ 说明

For details about subsequent installation operations, see steps 3 through 7 in "Pole-Mounted Installation".

后续安装的具体过程请参见“立杆抱装中的步骤3到步骤7”。

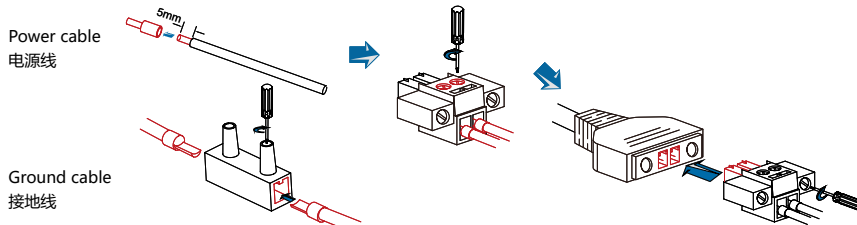
## Device Installation/ 设备安装

### F. Cable Connection/ 连接线缆

#### ⚠ CAUTION/ 注意

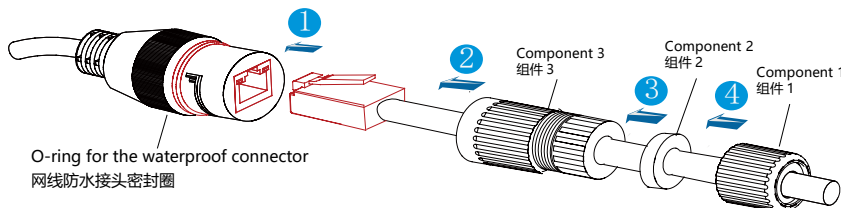
- In areas prone to lightning strikes, the surge protector must be installed and grounded.  
在易受雷击的区域，必须安装避雷器，避雷器必须接地。
- Strong and weak current cables must be kept at least 5 cm apart from each other. When connecting cables to the device, take care to avoid connecting strong current cables to weak current interfaces or you may damage your device.  
强电和弱电必须分开布线，两者间的距离不小于 5cm。线缆与设备连接时，禁止将强电接到弱电接口上，以免造成设备损坏。
- Wrap all pigtail cables in insulated, waterproof, rubber tape to prevent short circuits or water damage. Cutting off the pigtail cables will void your warranty.  
请务必使用绝缘胶带和防水胶带对所有尾线和球机上盖连接处进行绝缘和防水处理，以免造成短路和漏水。若剪断尾线，则无法维保。

- 1 Connect the ground cable to ground the device, and then connect the power cable. If crimp terminals are not used, the wire thickness cannot exceed 1.5 mm<sup>2</sup>, and the length cannot exceed 25 m. If crimp terminals are used, the wire can be up to 0.75 mm<sup>2</sup> for a 15 m length of wiring, or up to 1.0 mm<sup>2</sup> if 20 m is required. Longer wiring is not supported. The ground impedance cannot exceed 5 ohms.  
连接电源线和接地线。接裸线最大支持 1.5mm<sup>2</sup> (长度最大支持 25m) 电源线，配压线端子支持 0.75mm<sup>2</sup> (长度最大支持 15m) 或 1.0mm<sup>2</sup> (长度最大支持 20m) 电源线。接地线要求阻抗 ≤ 5Ω。



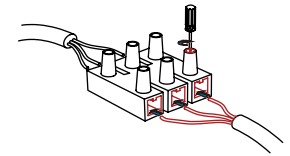
You need to prepare wiring terminals for connection.  
需自备接线端子对接。

- 2 Connect the network cable. Loosen the components 1, 2, and 3 of the waterproof connector kit on the network cable port in sequence, thread the network cable through the kit (If the network cable cannot be threaded through the kit, cut off the RJ45 connector.), and install the components in the sequence marked in the following figure. The waterproof connector of the network cable must be secured tightly, or they may come loose later.  
连接网线。先把网线接口上防水套件的组件 1、组件 2 和组件 3 依次旋转拆卸，然后穿入网线 (如果无法穿入，请剪掉水晶头)，再将各组件按如图所示顺序安装。网线防水接头务必拧紧到位，否则会有脱落风险。  
If the RJ45 connector of the network cable has a jacket and cannot be threaded through the kit, remove the jacket. If the jacket cannot be removed, cut off the connector and install an RJ45 connector without the jacket.  
如果网线水晶头带护套无法穿入，请剥离护套。若护套不可剥离，请剪掉水晶头后再重新铆压。



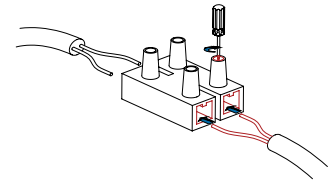
- 3 Connect the audio cable.  
连接音频线。

You need to prepare wiring terminals for connection. Alternatively, you can directly connect the bare wires.  
需自备接线端子对接，或直接以裸线对接。

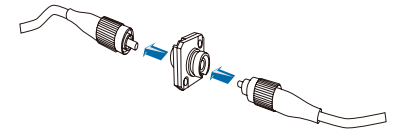


- 4 Connect the alarm cable. It is recommended the diameter of the alarm cable core ranges from 24 AWG to 28 AWG.  
连接告警线缆。告警线缆建议使用线芯的线径为 24AWG ~ 28AWG。

You need to prepare wiring terminals for connection. Alternatively, you can directly connect the bare wires.  
需自备接线端子对接，或直接以裸线对接。



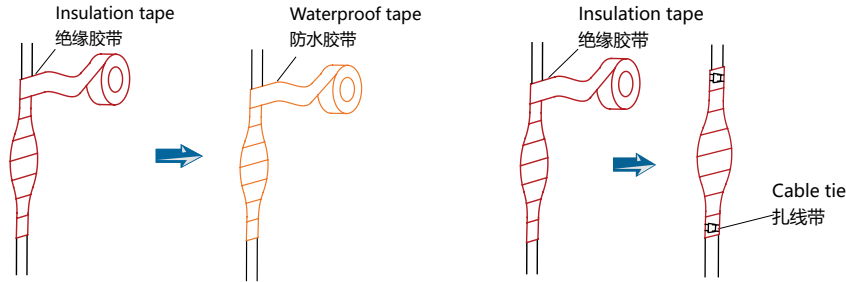
- 5 Connect optical fibers. The port is an FC/UPC port (only the camera that supports the fiber function provides the optical port).  
连接光纤，该接口为 FC/UPC 接口 (仅支持光纤功能的摄像机支持)。



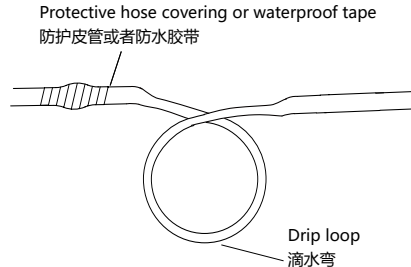
## Device Installation/ 设备安装

### G. Waterproofing and Insulation/ 防水绝缘处理

- 1 Insulate the cable connectors using insulation tape. Wrap one layer only. Stretch the waterproof tape evenly to twice its original length. Then apply one layer of waterproof tape. 用绝缘胶带在每条线缆对接处缠绕一层。均匀拉伸防水胶带，使其长度为原来的 2 倍，再缠绕一层。
- 2 Use the insulation tape to protect the waterproof tape layer. Then, use cable ties to secure the both ends. 再用绝缘胶带缠绕一层。最后用扎线带绑扎上下两端。



- 3 Cover the rest of the cabling in a conduit or with protective waterproof rubber tape. Make a drip loop as shown below to create an artificial lowest point of the cable. 使用防护皮管或者防水胶带，包住线缆其他部分，并制作滴水弯。滴水弯呈倒 Ω 型，形成线缆的最低点。



### NOTE/ 说明

- Waterproof and insulate all cables including power cables, network cables, and unused pigtail cables. 电源线、网线等所有的线缆，包括未使用的尾线都需要做防水绝缘处理。
- Before that, check the cabling and ensure that the camera runs normally to avoid reworkings. 做绝缘防水处理前请检查线缆是否接好并可正常工作，避免二次返工。
- The waterproof tape must cover the cable bundle from the insulation sheath all the way to the cable conduit (for example, a PVC tube). The tape must be wrapped tightly and there must be no gaps in the coverage or water will leak in. 防水胶带务必从线缆束绝缘外皮开始缠绕至防护皮管（如 PVC 管），且尽量缠紧，且覆盖到位，以免漏水。
- If a corrugated pipe is installed, a drainage hole should be deployed at the lowest point of the pipe to prevent water from getting into the pipe. Long-term soaking may cause pigtail damage. 若安装波纹管，请在波纹管的最低点做排水孔处理，避免波纹管内存水，导致摄像机尾线长期浸泡导致损坏。

## Installation Verification/ 安装后检查

### Verifying the Installation/ 安装后检查

After the device installation, check the following items to ensure that the device is properly installed.  
设备安装完成后，请确认如下事项，以保证设备安装正确。

Check Items/ 检查项	Result/ 检查结果
All screws are fully tightened. Ensure that all the joints are tight. 确认所有螺钉已经完全拧紧，以接合处不能偏移为准。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
The camera is securely installed on the mount or wall. 确认摄像机与支架或者墙壁等之间的安装是稳固可靠的。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
The ambient temperature meets the device specifications. 确认工作的环境温度满足设备规格。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
Insulation and waterproof measures have been taken to protect cables installed in humid environment, and the drip loops are in correct positions. 设备安装在潮湿环境时，确认网线以及尾线已经做好绝缘防水处理，滴水弯位置正确。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
If the camera has a ground cable, ensure that the camera is grounded. If it is powered by a PoE switch, ensure that the PoE switch is also grounded. 对于有接地线的摄像机，确认摄像机已接地。如果是 PoE 交换机供电，则 PoE 交换机也已接地。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
The protective film and fixing rubber strip have been removed from the lens and camera body. 对于有镜头保护膜和机身固定胶条的摄像机，确认已撕掉摄像机镜头保护膜和机身固定胶条。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
The camera can power on properly. 确认设备能够正常上电运行。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
You can access the camera web client using the IP address you configured. 确认能够使用配置好的 IP 地址登录设备 Web 页面。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
On the camera web client, you can view live video from the camera. 确认能够通过 Web 页面浏览实况。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
If the camera is a smart one, ensure that the captured target or vehicle image is clear. The recommended target resolution is at least 120 x 120 pixels. The recommended horizontal resolution of a license plate is at least 80 pixels. 如果是智能款型摄像机，请确保抓拍到的目标 / 车辆图片清晰，推荐目标大小为 120*120 像素及以上，车牌水平大小为 80 像素及以上。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>
In night vision mode, the detection area can be viewed clearly. 确认夜视情况下，能够看清楚检测区域。	Yes/ 是 <input type="checkbox"/> No/ 否 <input type="checkbox"/>



- 1 You can view the detection area on the web page.  
通过 Web 页面查看，被检测区域在镜头检测范围内。
- 2 The delivered images are clear.  
检测画面图像清晰。

<b>Data Plan/ 数据规划</b>		<b>Web Operations/Web 操作</b>	
<b>IP address/IP 地址</b>		<b>Network Settings/ 配置基本网络参数</b>	
<b>Parameter 参数名</b>	<b>Description 参数解释</b>	<ol style="list-style-type: none"> <li>1 Log in to the web client as the <b>admin</b> user. 以管理员 admin 登录 Web 客户端。</li> <li>2 Choose <b>Settings &gt; Network</b>. 选择“高级配置 &gt; 网络”。</li> <li>3 Set the network parameters as planned. For details about how to set basic network parameters, see the <i>Configuration Guide</i>. 根据规划的数据配置基本网络参数，基本网络参数的具体配置方式请参见《配置指南》。</li> </ol>	
IP address assignment method 获取IP方式	<ul style="list-style-type: none"> <li>Automatic: The system automatically configures the IP address, subnet mask, gateway IP address, and DNS. 自动获取IP地址：系统将自动配置IP地址、子网掩码、网关地址和DNS。</li> <li>Manual: You need to manually set the IP address, subnet mask, gateway IP address, and DNS. 使用下面的IP地址：需要用户手动配置IP地址、子网掩码、网关地址和DNS。</li> </ul>		
IP address IP地址	<ul style="list-style-type: none"> <li>IP addresses starting with 127 are not valid. You must enter an IP address starting with another value from 1 to 223. 以127开头的IP地址无效，请输入介于1和223之间的其它数值。</li> <li>If the camera is passively registered with the platform using the ONVIF or SDK, only the IP address needs to be configured. 通过ONVIF或SDK被动注册时，仅需要配置IP地址即可。</li> </ul>	<b>Specifications/ 技术参数</b>	
<b>NOTE/ 说明</b>			
<p>Use the iClient tool to perform site survey planning, batch upgrade, batch parameter setting, and maintenance for cameras.</p> <p>To obtain the iClient tool, visit <a href="http://support.huawei.com/enterprise">http://support.huawei.com/enterprise</a> and enter <b>iClient</b> in the search box.</p> <p>可使用 iClient 工具对摄像机进行工勘规划、批量升级、批量参数配置和维护。</p> <p>请登录 <a href="http://support.huawei.com/enterprise">http://support.huawei.com/enterprise</a> 网站，在搜索栏输入“iClient”搜索获取该工具。</p>		<b>Item 名称</b>	<b>Description 说明</b>
		Operating temperature 工作温度	For details about the temperature range, see the datasheet of the device model. Note: If the operating temperature is higher than 40°C, the illuminator cannot be enabled. If it is enabled, the camera may be damaged or its service life may be shortened. 具体温度范围请根据款型参见对应彩页。 注：工作温度大于40°C时不允许开补光，若开启会导致摄像机损坏或寿命下降。
		Corrosion resistance 防腐等级	Cameras that meet the Class C anti-corrosion requirements can be installed in areas 1500 meters away from the seaside (far away from chemical industry or heavily polluted areas). Cameras that meet the Class D anti-corrosion requirements can be installed in areas within 1500 meters from the seashore or on offshore platforms. C类防腐的摄像机，安装在距离海边1500米以外的区域（远离化工、重污染区）。 D类防腐的摄像机，可安装在海边1500米以内区域或海上平台。
<b>Web Operations/Web 操作</b>		<b>NOTE/ 说明</b>	
<b>Logging In to the Web Client/ 登录 Web 客户端</b>		The parameters listed in the table are for reference only. You can log in to <a href="http://e.huawei.com">http://e.huawei.com</a> , download the brochure of the desired camera model, and obtain the detailed technical specifications. 表格中所列参数仅供参考，您可以登录 <a href="http://e.huawei.com">http://e.huawei.com</a> ，查看对应的彩页，获取设备详细技术规格。	
<ol style="list-style-type: none"> <li>1 Open Internet Explorer, enter the camera IP address, and press <b>Enter</b>. The IP address can be set automatically via DHCP, or a static IP address can be used (default: 192.168.0.120). To directly log in to the camera using a computer, ensure that the computer is on the same network segment as the camera. When a DHCP server exists in the network, an IP address is automatically allocated to the camera. 当通过 PC 机直连访问摄像机时，请保证 PC 机 IP 地址和摄像机 IP 地址在同一网段。在 Internet Explorer 地址栏里输入摄像机的 IP 地址，IP 地址可以手动进行设置（默认为 192.168.0.120），按“Enter”键。当网络中有 DHCP 服务器时，摄像机可以通过 DHCP 服务器自动获取 IP 地址。</li> </ol>			
<b>NOTE/ 说明</b>			
<ul style="list-style-type: none"> <li>Supported browsers: Internet Explorer 10-11, Google Chrome 38 and later versions, and Mozilla Firefox 35-51. Google Chrome 45 and later versions require installation of Internet Explorer Tab plug-in. 支持的浏览器：Internet Explorer 10/11、Google Chrome 38及以上版本、Mozilla Firefox 35~51版本。其中 Google Chrome 45及版本以上需要安装Internet Explorer tab插件。</li> <li>When using HTTPS to access a camera, you must enable TLS 1.1 or TLS 1.2. Otherwise, the camera web page cannot be displayed. 使用HTTPS协议访问摄像机时需要启用TLS 1.1或TLS 1.2，否则无法打开摄像机web页面。</li> <li>Please open the web browser on your PC as the administrator. 请使用PC的管理员身份打开浏览器。</li> </ul>			
<ol style="list-style-type: none"> <li>2 Enter the user name (<b>admin</b>) and password. For the first login, set the password as prompted. 输入用户名 admin 和密码。首次登录，请按照提示设置密码。</li> <li>3 Click <b>Log In</b>. 单击“登录”。</li> </ol>			

Q : After you enter the camera IP address in the address box and press Enter, the Internet Explorer displays "There is a problem with this website's security certificate."

A : Click **Continue to this web (not recommended)** to continue browsing this website. Then, install the root certificate or upload your own certificate. For details, see *Configuration Guide*.

问：在 IE 浏览器中输入设备 IP 地址后，网页显示“此网站的安全证书有问题”？

答：单击“继续浏览此网站（不推荐）”，继续访问设备 Web 页面，然后安装根证书或上传用户自己的证书文件，具体操作请参见《配置指南》。

Q : After the root certificate is installed, the Internet Explorer still displays "There is a problem with this website's security certificate." After you click **Continue to this web (not recommended)** to access the login page, the "Certificate Error" message is displayed in the address box.

A : Choose **Settings > System > Configuration Management > Certificate Management**, and upload a valid certificate. After the certificate is uploaded, restart the browser.

问：根证书下载安装完成后，IE 仍提示“此网站的安全证书有问题”，单击“继续浏览此网站（不推荐）”进入登录页面后，地址栏中出现“证书错误”提示。

答：选择“高级配置 > 系统配置 > 配置管理 > 证书管理”，上传用户自己的合法证书，完成后重新启动浏览器。

Q: What can I do when the message "Your request for URL has a security risk. You can access this URL by clicking the Continue, I accept this risk. button. If you make this choice, it means that you accept this risk." is displayed during a login attempt?

A: Choose **Tools > Internet Options**, click the **Connections tab**, click **LAN Setting**, and deselect **Use a proxy for your LAN**.

问：通过 web 页面登录摄像机时显示“您访问的链接存在安全风险。若您接收此风险，请点击“继续，我接受此风险”按钮继续访问”，应如何处理？

答：选择“工具 > Internet 选项”，选择“连接”页签，点击“局域网设置”，“为 LAN 使用代理服务器”选择框去掉勾选。

Q : The message "Heating..." is displayed while the live video can be properly viewed.

A : If the camera is started in low-temperature environment, the camera may enter the low-temperature protection mode. In this case, the message "Heating..." will be displayed on the live video. When the temperature of the camera rises, the message will disappear.

问：Web 实况出现“Heating...”字样，而图像画面可以显示实况。

答：在低温环境下启动 SDC，设备有可能会进入低温保护模式，实况页面带有“Heating...”字样，等 SDC 温度上升后，Heating...”字样会消失。

Q : What can I do if files or the SDC Web Control cannot be downloaded?

A : In Internet Explorer, choose **Tools > Internet Options > Advanced** and click **Reset** to restore the default browser settings. Then restart the computer and log in to the web client again.

问：下载文件或者 SDC Web Control 实况控件失败，应如何处理？

答：在 Internet Explorer 中选择“工具 > Internet 选项 > 高级”，单击“重置”，恢复默认配置后，重启电脑，再次登录设备的 Web 客户端。

## Warranty Card



Thank you for choosing products of Huawei Technologies Co., Ltd. (Huawei). To be entitled for warranty service for the product, please read the following warranty statements carefully.

### 1. Warranty Period

Unless otherwise stated specifically by Huawei, the following periods apply:

You are entitled a free warranty service of at least 12 months for the camera you purchased from Huawei. The specific warranty duration is subject to the sales contract.

The start date of the warranty:

The warranty starts on the 90th day after the date of the product shipment from Huawei, or the date of receiving service request, whichever is earlier.

#### Notes:

1. If there is any conflict with contract terms and conditions, the contract terms and conditions shall prevail.
2. When you purchase a product from Huawei, please confirm the date when the product will be shipped from Huawei, and check other warranty-related information.
3. For expansion and replacement parts, you are entitled to either of the following warranties (whichever is longer):
  - (1) A 90-day warranty starting from the date the replacement parts are shipped
  - (2) The remaining warranty of the original equipment
4. Warranty service is provided for the lithium battery modules for the S series switches, but the terms related to hardware warranty service response time in the **Enterprise Warranty Policy** do not apply to the lithium battery modules.

### 2. Service Guidelines

This warranty card entitles you to free warranty service within the warranty period.

Technical Support: Visit <http://e.huawei.com>, click **Contact Us** at the upper right corner of the page, and select your country to obtain contact information of Huawei local office.

TAC Support: Visit <http://e.huawei.com> and choose **Contact Us > Service Hotline** to find the service hotline available in your country.

Complete the form below and keep for ready reference:

Product supplier: \_\_\_\_\_

Supplier telephone number: \_\_\_\_\_

Product serial number: \_\_\_\_\_

# 保修卡



尊敬的用户，感谢您使用华为技术有限公司（以下简称华为）的产品，请详细填写保修卡内容，并将下面的保修卡厂家留存联寄回华为公司，华为公司会登记备案，并保证您的以下权益：

- 您购买的主机可获得最少12个月的设备免费保修服务，合同中有约定的，以销售合同为准。
  - 保修期起始时间计算方式：  
发货之日起九十（90）日或买方第一次申请保修服务之日起孰早开始计算，最晚保修起算时间不超过发货之日起九十（90）日。
  - 请注意：
    - 在购买产品时，为保障您的权益，请确认产品从华为的发货日期等保修相关信息。
    - 扩容部件与故障更换件的保修期为华为发货之日起90天，或者跟随主机原有的剩余保修期服务，以两者中较长的时间为准。
    - 免费保修服务仅限于主机（系列主板、电源模块、风扇模块、通信模块、硬盘）和相关辅助部件。
    - S系列交换机配套的锂电池模块提供保修，但不适用《标准保修说明书》的硬件返修服务响应时间条款。
  - 用户可凭保修卡享受保修期内的基本保修服务，服务的详细内容可查看《企业产品保修概览》，该保修说明书可在华为企业业务网站 (<http://e.huawei.com>) 查询。
  - 中文保修卡仅适用于中国大陆。
    - 华为公司Help Desk热线：400-822-9999（7\*24小时）
    - 商业分销产品授权服务中心网站：<http://e.huawei.com>
- 用户名称：\_\_\_\_\_ 经销商：\_\_\_\_\_
- 产品型号：\_\_\_\_\_ 详细地址：\_\_\_\_\_
- 产品条码：\_\_\_\_\_ 邮编：\_\_\_\_\_ 电话：\_\_\_\_\_
- 购买日期：\_\_\_\_\_年\_\_\_\_月\_\_\_\_日 传真：\_\_\_\_\_ E-mail：\_\_\_\_\_
- 经销商单位：（盖章）

## (用户留存)

保修卡须经经销商盖章方有效

### 保修卡（经销商留存）



用户名称：\_\_\_\_\_

详细地址：\_\_\_\_\_

邮编：\_\_\_\_\_ 电话：\_\_\_\_\_

传真：\_\_\_\_\_ E-mail：\_\_\_\_\_

产品条码：\_\_\_\_\_

购买日期：\_\_\_\_\_年\_\_\_\_月\_\_\_\_日

经销商：\_\_\_\_\_

经销商单位：（盖章）

### 保修卡（厂家留存）



用户名称：\_\_\_\_\_

详细地址：\_\_\_\_\_

邮编：\_\_\_\_\_ 电话：\_\_\_\_\_

传真：\_\_\_\_\_ E-mail：\_\_\_\_\_

产品条码：\_\_\_\_\_

经销商单位：（盖章）

**重要提示：** 请将此联寄回以下地址  
广东省东莞市松山湖科技园新城大道6号  
华为南方工厂C7-1F 华为维修服务中心  
电话：0755-28560555（5\*8h: 8:30-12:00, 13:30-18:00）  
邮编：523808  
邮附件上注明保修卡

## Appendix/ 附录

### Security Precautions/ 安全注意事项

Carefully read and strictly comply with the following instructions. Pay special attention to the alarm details in this manual:

请仔细阅读本说明并严格遵守，留意本手册中的所有警告信息。

- After the camera is unpacked, please install and power it on within 24 hours. Do not install the camera in rainy or windy and dusty days to prevent water or sand from getting into the device.  
设备打开包装后，请在24小时内完成安装上电；避开在雨天和风沙天操作，避免内部进水和进沙而导致的设备故障。
- The power adapter to be used by the device must meet the input voltage and current requirements described on the device label.  
设备所使用的电源适配器必须满足设备标签上注明的电源输入电压和输入电流要求。
- In areas prone to lightning strikes, the surge protector must be installed and grounded.  
在易受雷击的区域，必须安装避雷器，避雷器必须接地。
- Ensure that the wall or pole to which the camera mounts can bear at least four times the weight of the bracket, housing, and camera.  
检查安装设备的墙面或者立杆，至少能够承受支架、护罩和摄像机总重的4倍的重力。
- CAUTION** If a battery is replaced by an incorrect type, the batter may explode. Dispose of used batteries according to the instructions.  
**注意** 如果更换不正确的电池规格会有爆炸的风险，请按制造商说明书处理使用过的电池。
- This is a class A product, operation in a residential environment this product may cause radio interference in which case the user may be required to take adequate measures.  
此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。
- Use a soft dry cloth when cleaning the camera body. Do not use strong and abrasive alkaline cleaner or volatile solvent such as alcohol, benzene, or thinner.  
清洁机身可用柔软的干布擦拭，请勿使用如酒精、苯或稀释剂等挥发性溶剂或者强烈的、带有研磨性的碱性清洁剂。
- Keep the device away from water or any other liquids. Take proper waterproofing measures.  
禁止让任何液体流入设备中。做好防水措施。
- Keep the device away from heat sources, fire sources (such as heating apparatus or candles), and strong magnetic fields (for example, high-voltage power distribution cabinet).  
安放设备时请远离热源、裸露的火源（例如电暖器、蜡烛等）和强磁场环境（例如高压配电箱）。
- Avoid any unauthorized modifications on the design of the structure, security, or performance.  
未经授权，任何单位和个人不得对设备进行结构、安全和性能方面的改动。
- Installation and maintenance must be performed by professional technical engineers or system installation engineers.  
有关本装置的所有安装维修工作均应由专业的维修技术人员或系统安装人员来完成。
- Use product-attached auxiliaries and recommended fittings.  
请使用产品配套的附件以及厂商推荐的配件。
- Do not lift the pigtails when moving the device.  
搬运设备时，禁止通过提尾线搬运。
- Comply with related laws and regulations, and respect legal rights of others when using this device. If a camera is installed in a public place, post a clearly visible notice stating, "You have entered an electronic surveillance area."  
使用本设备时应遵循相关的法律法规，尊重他人的合法权利。如果您在公共场所安装摄像机，请在醒目的位置给予提示：您已进入电子监控范围。



**Risk Group 1**  
NOTICE IR emitted from this product. Use appropriate shielding or eye protection.  
危险级别1  
注意 本产品发射红外光，请使用适当的遮挡或眼睛保护措施。