

高清智能网络摄像机
Intelligent Speed Dome Camera

KEDACOM

快速安装指南
Quick Start Guide

一 前言

感谢您购买我司产品，如对本公司产品有疑问或需要，请随时和我们联系。

此内容（手册）的目的是确保用户正确使用本产品，以避免危险或财产损失。在使用产品之前，请认真阅读此手册并妥善保存以备日后参考。如果用户因没有按照以下安全说明，致使设备不能正常使用或损坏等情况，我司恕不负责，感谢您的配合。

二 安全说明

1. 电源要求

- 请在安装使用设备过程中，严格遵守当地各项电气安全规定。
- 请使用满足安全电压要求的电源，在设备运行之前检查供电电源是否正确。
- 请在安装配线时装入易于使用的断电设备，以便必要时进行紧急断电。
- 请保护电源软线免受踩踏或紧压，特别是在插头、电源插座和从装置引出的接点处。
- 请在断电状态下连接网络、电源等线缆，严禁在设备上电的情况下连线。

2. 使用环境要求

- 请勿将摄像机对准强光（如灯光照明、太阳光等处）聚焦，否则容易引起过亮或漏光现象（这并非摄像机故障）也将影响摄像机寿命。
- 请在允许的湿度和温度范围内运输、使用和存储设备。
- 请勿将设备置于潮湿、多尘、极热、极冷、强电磁辐射或照明条件不稳定等场所。
- 请勿让任何液体流入设备，以免内部元件受损。
- 请勿阻挡设备附近的通风口，以免热量积蓄。
- 请在运送设备时，重新以出厂时的包装进行包装，或用同等品质的材质包装。
- 请勿在运输、存储及安装过程中重压、剧烈震动、浸泡设备。
- 请勿安装在不牢固的支架、墙面、或屋顶上，否则会导致人机受损。

| 工作环境 | |
|------|---------------|
| 供电要求 | AC 24V±10%，4A |
| 环境要求 | 防雷、防浪涌、防突波 |
| 海拔高度 | 2Km |
| 温度 | -40°C~70°C |
| 湿度 | 10%~95%（无凝结） |

3. 日常维护与保养

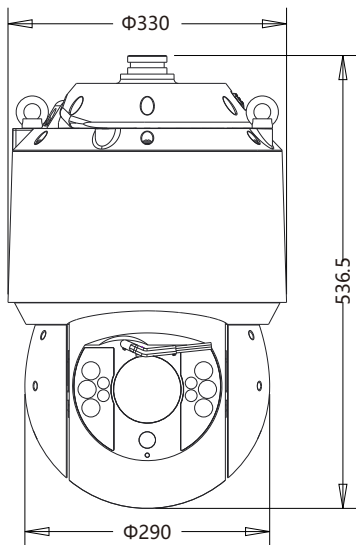
- 请勿直接触碰设备发热部件，以免烫伤。
- 镜头玻璃表面沾染灰尘或油脂时，用棉布或镜头清洁布擦拭。若遇污垢难以清除，蘸上少量镜片清洁剂，自镜头中心向外旋转轻轻擦拭，直到干净为止。禁止使用有机溶剂（苯、酒精等）对镜头玻璃和护罩前脸进行除尘、清洁。
- 请不要以任何方式拆卸或修改产品（对未经认可的操作导致的问题，本公司不承担任何责任）。
- 如果设备工作不正常，请联系经销商或最近的服务中心。

4. 特别声明

- 本手册中的图示仅供参考，产品请以实物为准。
- 我们尽最大努力来保证本手册信息的正确性，如因升级等原因发生信息修改，恕不另行通知。本手册能作为多个型号产品的使用指导，由于篇幅有限，不一一列举每个产品的使用情况，请您根据实际产品自行对照。
- 本产品使用IPCSearch激活后方能使用（IPCSearch可在官网下载，下载链接<https://www.kedacom.com/cn/softtools/index.jhtml>），激活时请填写有效邮箱，方便找回密码。强烈建议您将密码设置为强密码：由数字、大/小写字母或特殊符号中两种或两种以上类型组合而成，且密码长度满足8-16位。请您定期更改用户名的密码，建议每3个月更新一次密码。如果设备在较高安全风险的环境中使用，建议每月或每周更新一次。请妥善保管好您的用户名与密码。
- 如需获取最新文档，请至官网下载，官网地址www.kedacom.com。

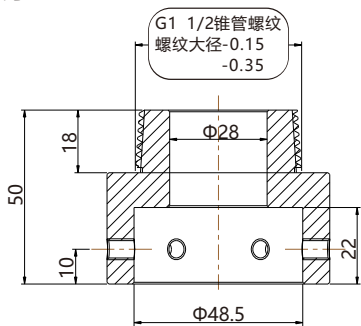
三 设备外观

外观尺寸

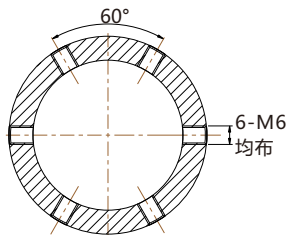


单位: mm
净重: 18.5Kg

转接环尺寸



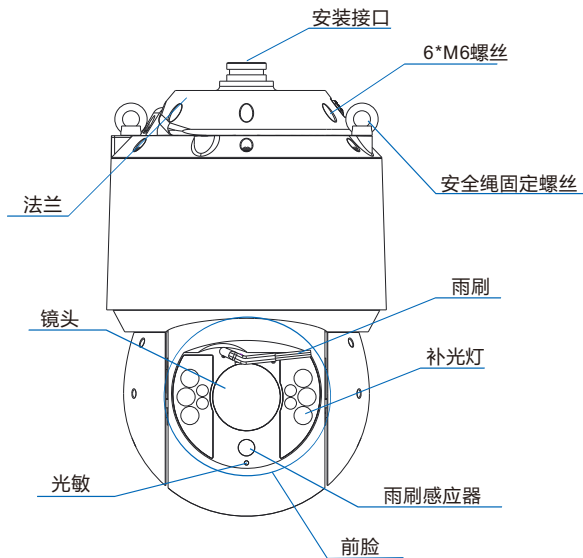
转接环剖面图

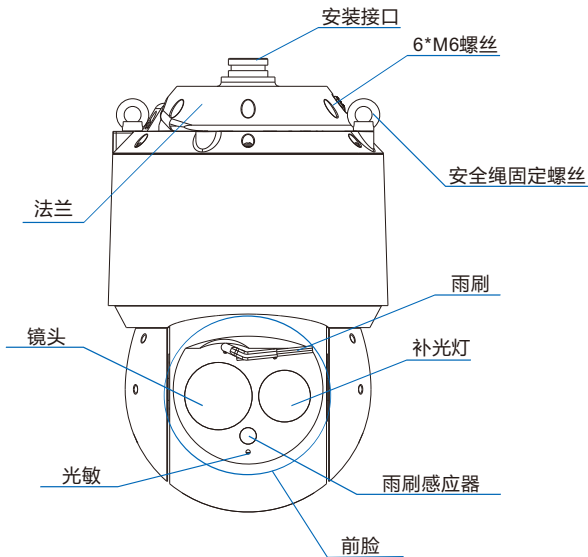


转接环仰视图

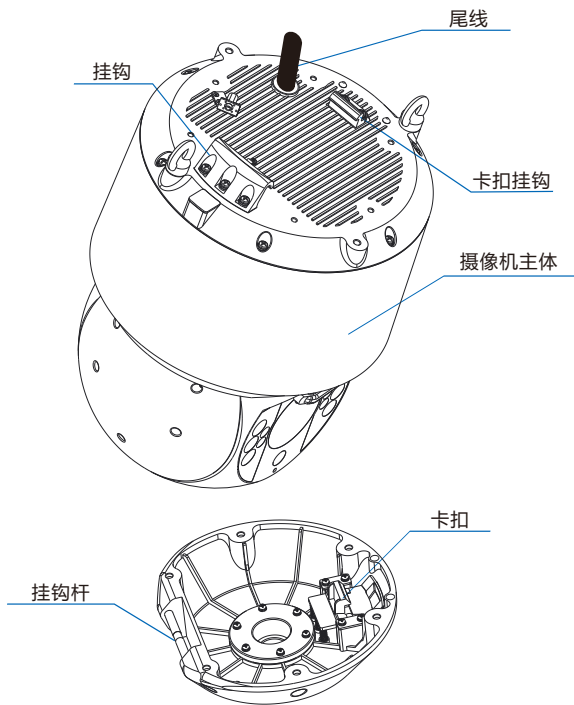
单位: mm

部件说明

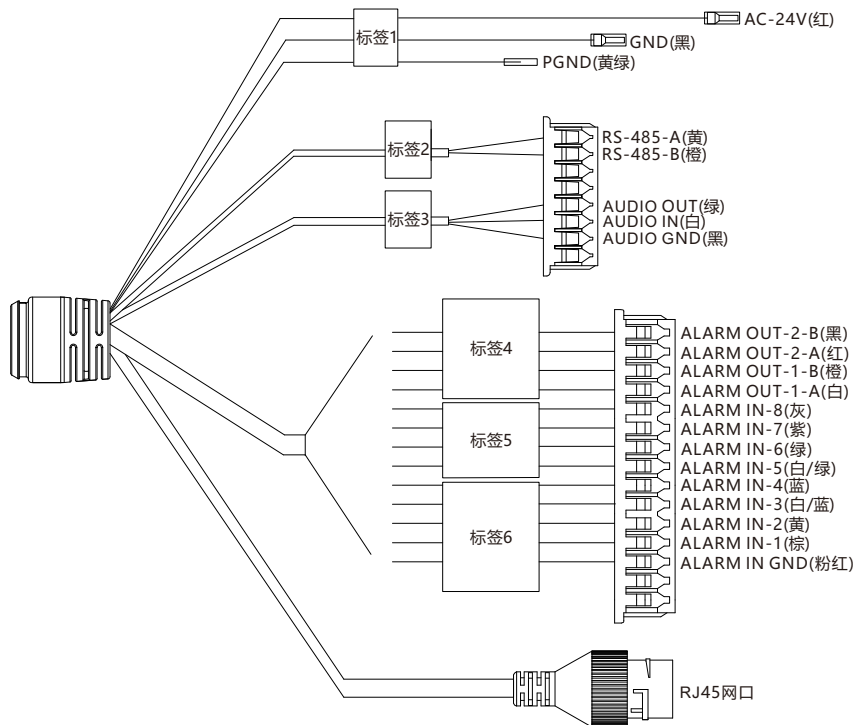




【说明】 摄像机分为红外款和白光款，前脸部位的镜头与补光灯，具体以实际产品为准。本手册安装图示以红外款为例。



尾线说明



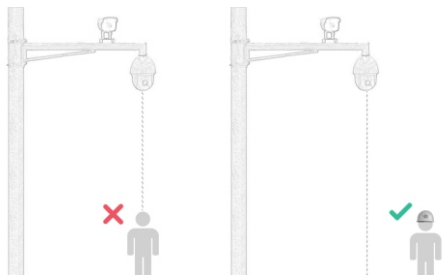
| 标签 | 颜色 | 说明 | 组别 | 线序 |
|---------------|-----|--------------------------------|----|----|
| AC-24V | 红 | 电源, 连接AC24V电源 | 1 | - |
| PGND | 黄绿 | 保护接地 | | - |
| GND | 黑 | 电源接地 | | - |
| RS-485-A | 黄 | Rs485串口, 与外接设备交互控制, 如控制第三方设备 | 2 | 1 |
| RS-485-B | 橙 | | | 2 |
| AUDIO OUT | 绿 | 音频输出, 输出音频信号, 连接音箱等设备 | 3 | 5 |
| AUDIO IN | 白 | 音频输入, 输入音频信号, 连接拾音器等设备 | | 6 |
| AUDIO GND | 黑 | 音频接地 | | 7 |
| ALARM OUT-2-B | 黑 | 告警输出, 输出告警信号, 端子不分正负。连接报警灯等设备。 | 6 | 15 |
| ALARM OUT-2-A | 红 | | | 14 |
| ALARM OUT-1-B | 橙 | | | 13 |
| ALARM OUT-1-A | 白 | | | 12 |
| ALARM IN-8 | 灰 | 告警输入, 输入告警信号, 连接声控开关等设备 | 5 | 11 |
| ALARM IN-7 | 紫 | | | 10 |
| ALARM IN-6 | 绿 | | | 9 |
| ALARM IN-5 | 白/绿 | | | 8 |
| ALARM IN-4 | 蓝 | | 4 | 7 |
| ALARM IN-3 | 白/蓝 | | | 6 |
| ALARM IN-2 | 黄 | | | 5 |
| ALARM IN-1 | 棕 | | | 4 |
| ALARM IN GND | 粉红 | 告警输入接地 | | 3 |
| RJ45网口 | - | RJ45网口, 连接网络设备, 支持10/100自适应 | - | - |

【说明】 ALARM IN-N与ALARM IN GND需成对使用。

四 设备安装

1. 安装注意事项

- 确认安装地点有容纳本产品及其安装结构件的足够空间。
- 请确保安装摄像机的墙面、横杆等的承受能力必须能支撑摄像机及其安装结构件重量的8倍（设备重量：18.5kg）。支架刚性足够，能保证设备在大风情况下不晃动。
- 镜头附近不允许出现遮挡物。
- 用户自选支架安装推荐使用接口为内螺纹的支架，同时须确保支架的防水性能。
- 没有限高通行的路段，建议外延摄像机的安装高度不低于5米，减少摄像机被碰擦风险。
- 防止设备掉落，安装摄像机时必须安装安全绳。
- 施工期间禁止人员在摄像机下方2米内活动，并佩戴好安全帽等防护装备。



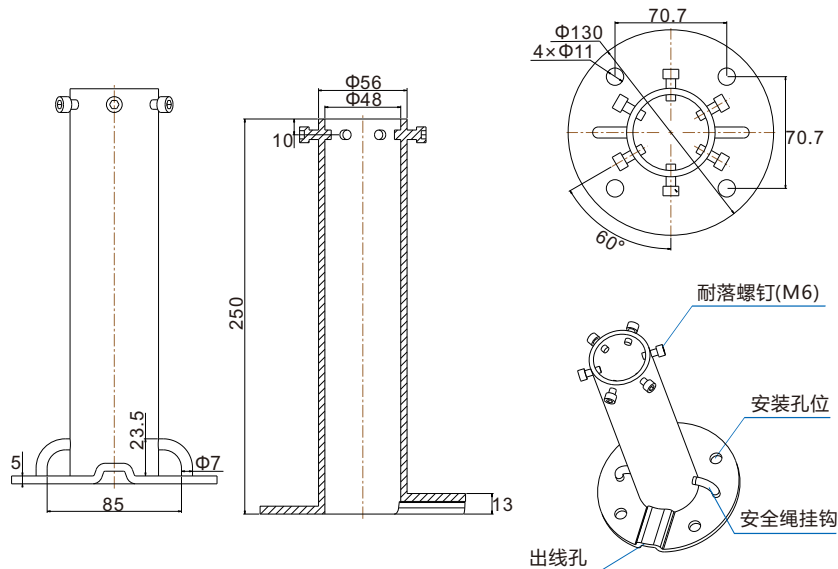
2. 安装方式

设备分为吊装、壁装和转接环安装。

【注意】支架为选配附件。

吊装

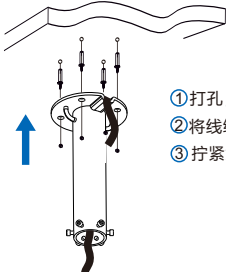
我司选配吊装支架尺寸：



单位：mm

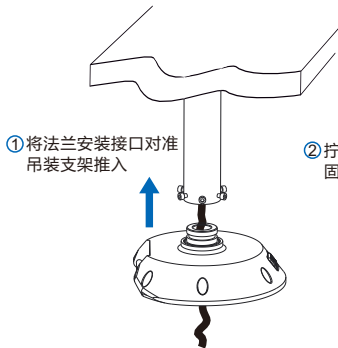
• 安装步骤

- 1) 拧下6颗M6法兰螺钉，将法兰从摄像机主机上拆下；
- 2) 以吊装支架的安装孔位为模板，在墙壁上先画出安装孔位置，打出安装孔（孔深为60mm），并将膨胀螺栓（M8）埋在打好的孔内；
- 3) 将线缆通过出线孔从支架穿出，线缆请预留足够长度，以便连接球机内线缆；
- 4) 将吊装支架固定在墙壁上，拧紧六角螺母；

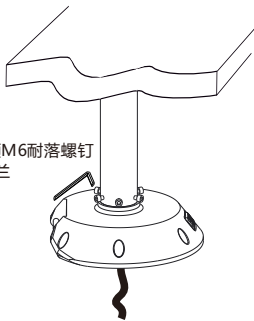


- ① 打孔，将膨胀螺钉埋入墙体
- ② 将线缆通过出线孔从支架穿出
- ③ 拧紧六角螺母，以固定支架

- 5) 将法兰安装接口对准吊装支架推入，拧紧吊装支架上的6颗M6耐落螺钉，以固定法兰；



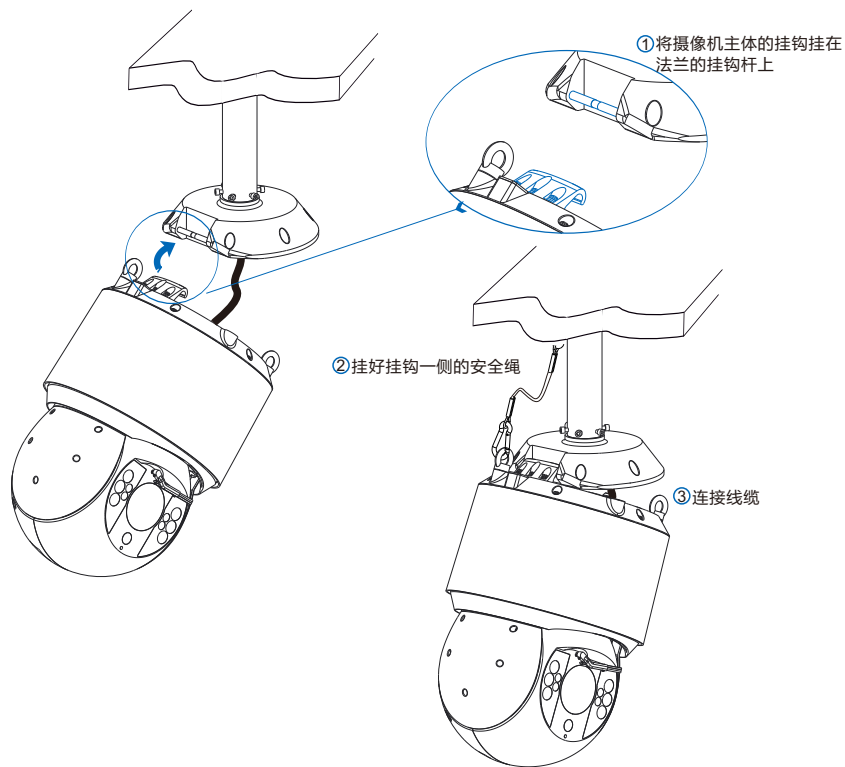
- ① 将法兰安装接口对准吊装支架推入



- ② 拧紧6颗M6耐落螺钉固定法兰

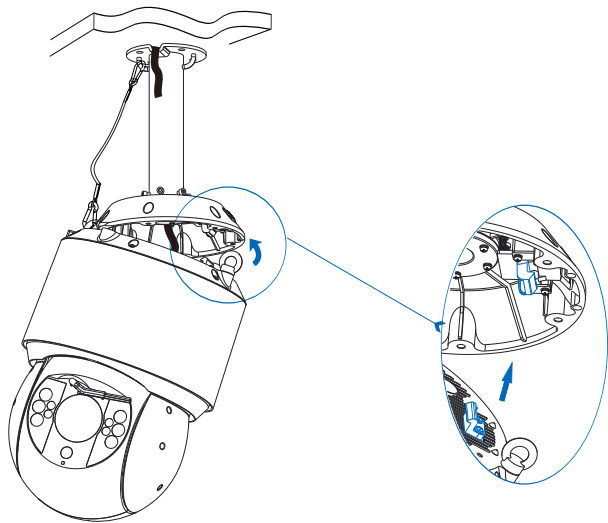
【注意】 为避免球机产生晃动，请务必保证拧紧六颗耐落螺钉。

- 6) 将摄像机主体的挂钩挂在法兰挂钩杆上，将安全绳一端挂在该侧的安全绳螺丝上，另一端挂在吊装支架的安全绳挂钩上。连接线缆；

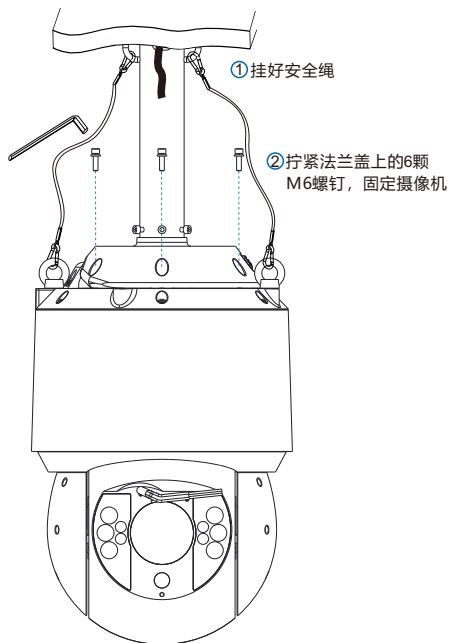


【注意】 尾线连接时，请务必做好防水处理。操作方法请参考附录。

7) 用力向上托举摄像机主体，使其与法兰卡扣锁扣在一起；



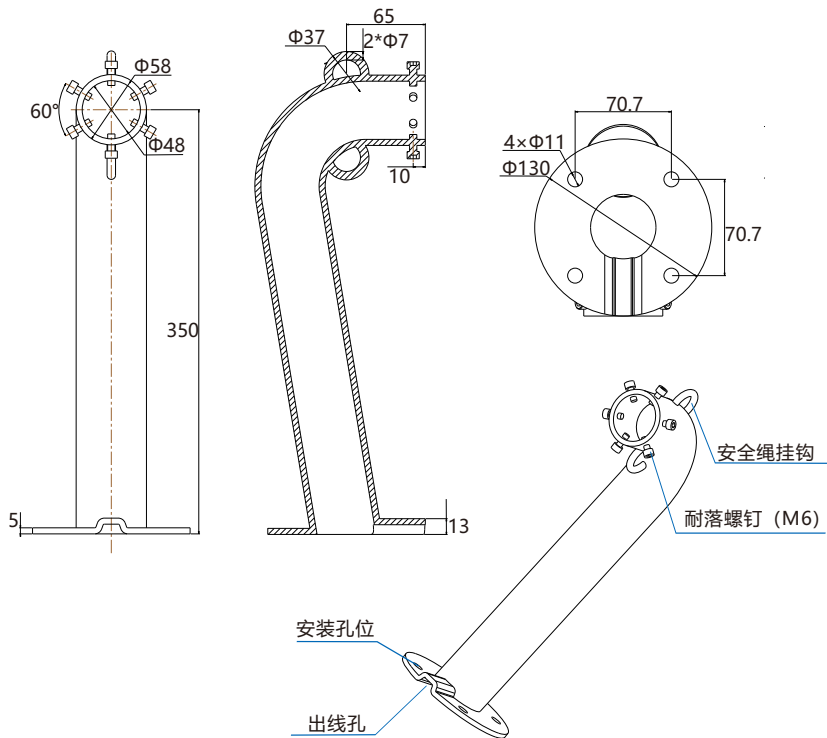
- 8) 将安全绳的一端挂在卡扣一侧安全绳固定螺丝上，另一端挂在支架安全绳挂钩上，拧紧法兰螺钉，固定摄像机；



- 9) 安装完成后，设备上电。

壁装

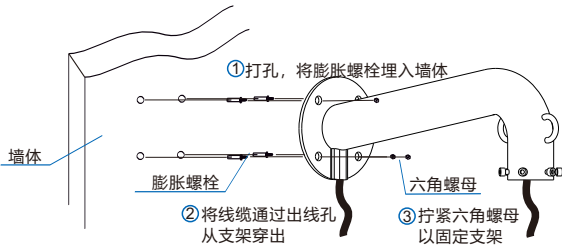
我司选配壁装支架尺寸:



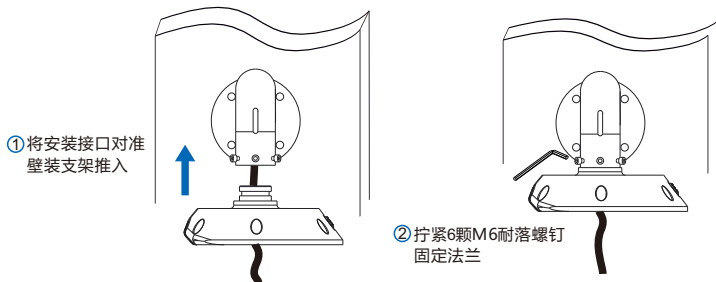
单位: mm

• 安装步骤

- 1) 拧下6颗M6法兰螺钉，将法兰从摄像机主机上拆下；
- 2) 以壁装支架的安装孔位为模板，在墙壁上先画出安装孔位置，打出安装孔（孔深为60mm），并将膨胀螺栓（M8）埋在打好的孔内；
- 3) 将线缆通过出线孔从支架穿出，线缆请预留足够长度，以便连接球机内线缆；
- 4) 将壁装支架固定在墙壁上，拧紧六角螺母；

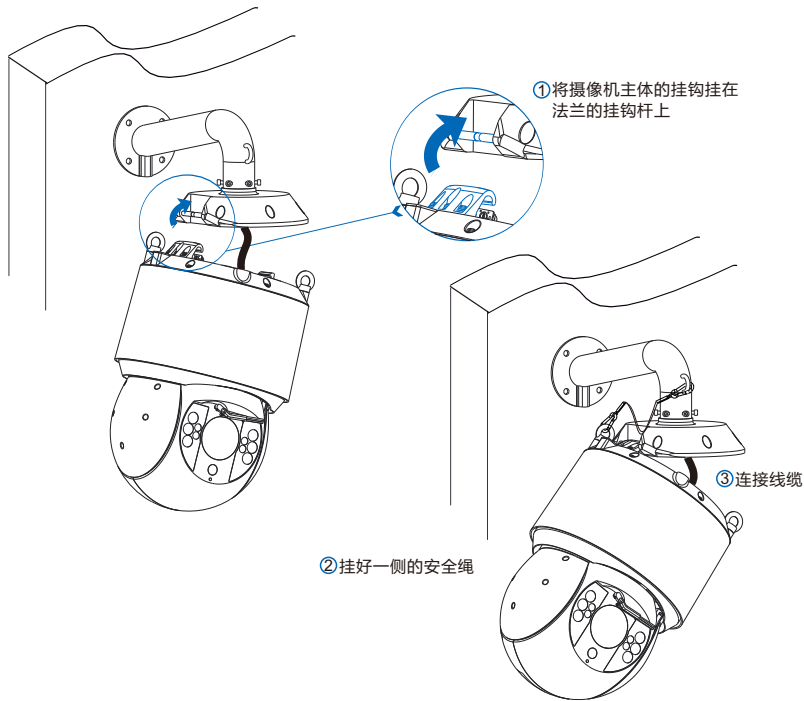


- 5) 将安装接口对准壁装支架推入，拧紧壁装支架上的6颗M6耐落螺钉，以固定法兰；



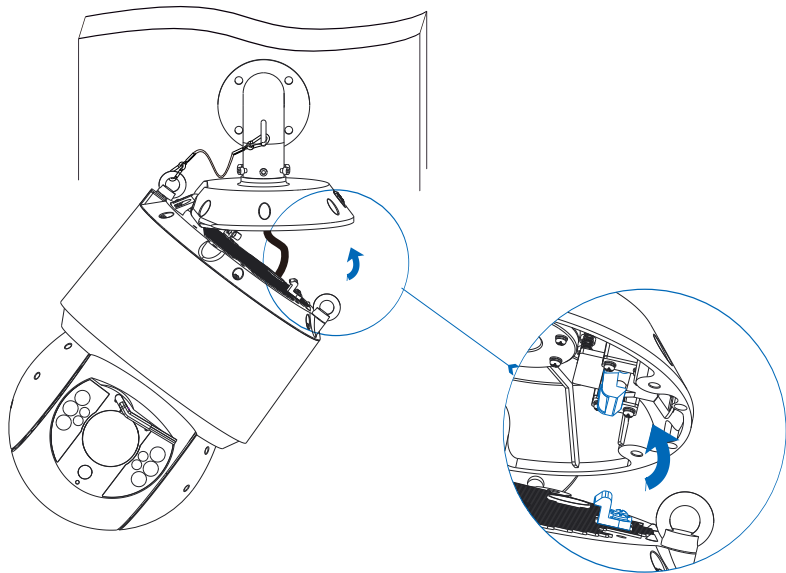
【注意】 为避免球机产生晃动，请务必保证拧紧六颗耐落螺钉。

- 6) 将摄像机主体的挂钩挂在法兰挂钩杆上，将安全绳一端挂在该侧的安全绳螺丝上，另一端挂在吊装支架的安全绳挂钩上。连接线缆；

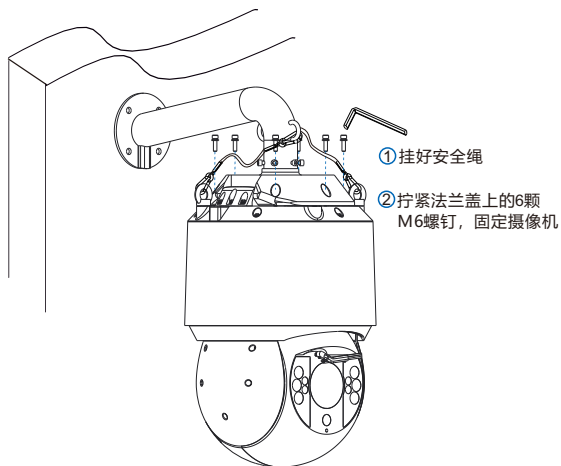


【注意】 尾线连接时，请务必做好防水处理。操作方法请参考附录。

7) 用力向上托举摄像机主体，使其与法兰卡扣锁扣在一起；



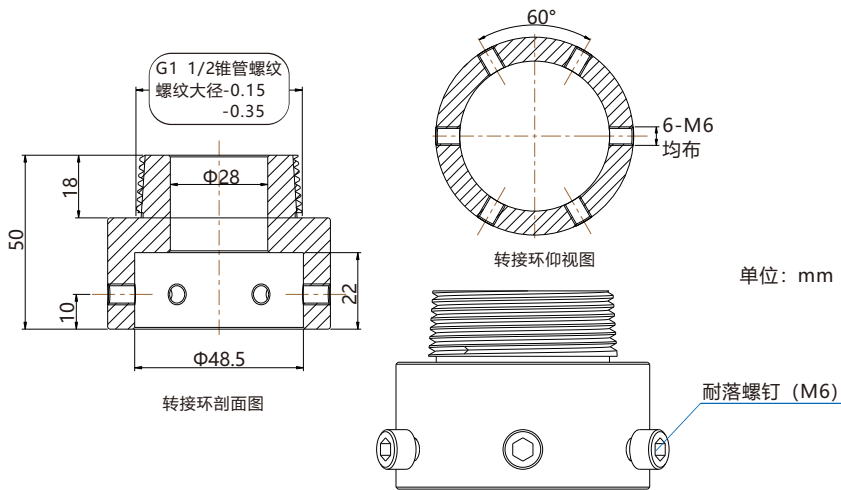
- 8) 将安全绳的一端挂在卡扣一侧安全绳固定螺丝上，另一端挂在支架安全绳挂钩上，拧紧法兰螺钉，固定摄像机；



- 9) 安装完成后，设备上电。

转接环安装

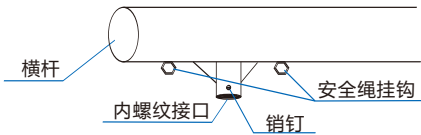
转接环尺寸



转接环适用于用户自定义支架为内螺纹时使用，以下安装步骤以横杆为例。

• 安装步骤

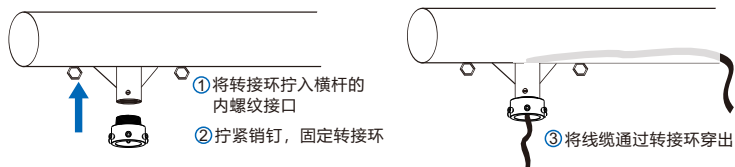
1) 准备已经焊接好内螺纹接口的横杆，距内螺纹接口8~10mm处须安装销钉；



【注意】 用户自制的支架务必要有销钉和安全绳挂钩。

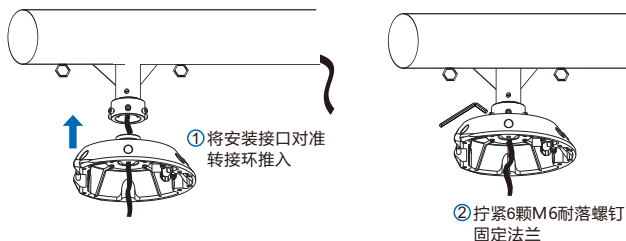
2) 将转接环拧入横杆上的内螺纹接口并拧紧。拧紧销钉，以固定转接环；

3) 将线缆通过转接环穿出，线缆请预留足够长度，以便连接球机内线缆；



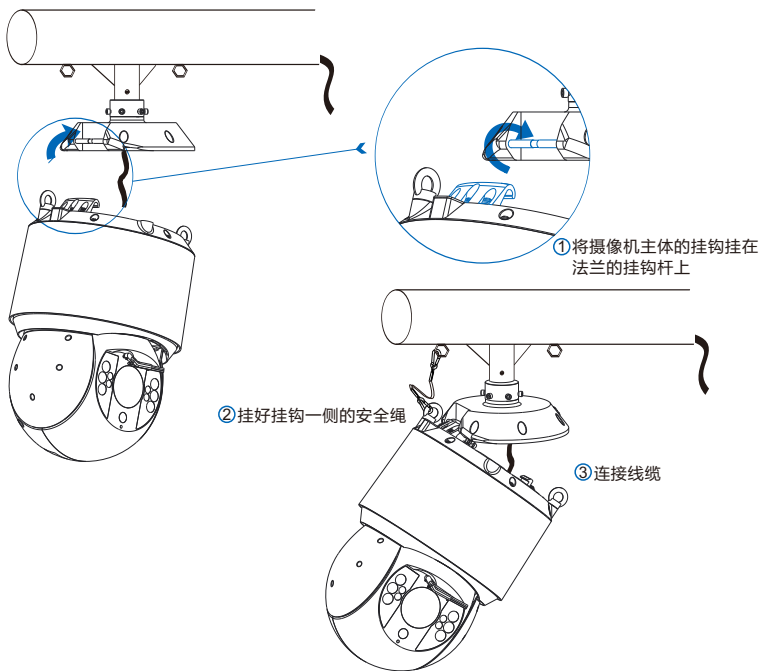
4) 拧下6颗M6法兰螺钉，将法兰从摄像机主机上拆下；

5) 将安装接口对准转接环推入，拧紧转接环上的6颗M6耐落螺钉，以固定法兰；



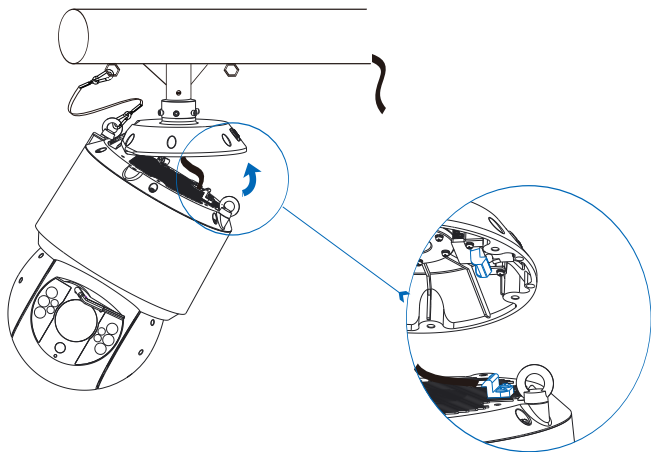
【注意】 为避免球机产生晃动，请务必保证拧紧六颗耐落螺钉。

- 6) 将摄像机主体的挂钩挂在法兰挂钩杆上，将安全绳一端挂在该侧的安全绳螺丝上，另一端挂在横杆的安全绳挂钩上。连接线缆；

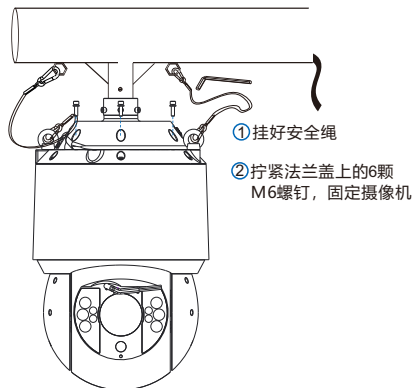


【注意】 尾线连接时，请务必做好防水处理。操作方法请参考附录。

7) 用力向上托举摄像机主体，使其与法兰卡扣锁扣在一起；



- 8) 将安全绳的一端挂在卡扣一侧安全绳固定螺丝上，另一端挂在横杆安全绳挂钩上，拧紧法兰螺钉，固定摄像机；



- 9) 安装完成后，设备上电。

五 登录客户端

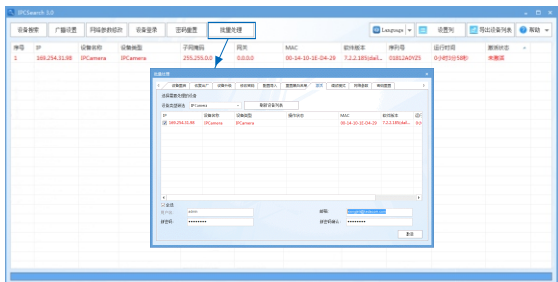
1. 最低配置和系统环境

- 处理器：酷睿®i5-7500及以上
- 显卡：HD630核显及以上
- RAM内存：8GB及以上
- 操作系统：Windows7操作系统或更高版本
- 浏览器（32位）：360浏览器，IE11.0及以上版本，Firefox（51.0及以下版本），Google Chrome（41.0及以下版本）
- WEB插件：硬解插件
- DirectX：9.0c

2. 设备激活

第一次使用时请安装运行IPCSearch，在IPCSearch中将显示设备的IP地址、网关等信息。若IPC设备所接入的网络有DHCP服务，DHCP服务器将自动给IPC设备分配IP地址。

- 批量激活：在IPCSearch中选中设备，点击**批量处理**，在弹出的界面中设置admin用户的密码和找回密码时所需的邮箱，点击**激活**，激活设备。待设备重启。
- 单个激活：在IPCSearch中选择设备，单击右键，选择**设备激活**。填写用户名、密码、找回密码时所需的邮箱。点击**激活**，激活设备。待设备重启。
- Web客户端激活：将PC机IP地址与设备IP地址设为同一网段，进入Web端登录界面。可在该界面设置管理员和找回密码所需的邮箱，点击**激活**，激活设备。





3. 修改设备IP

点击**修改网络参数**，在弹出的界面中配置网络参数。静态分配IP地址时，请选择自定义地址，填写以太网参数。修改参数配置，需要填写管理员用户用户名（admin）及激活设备时设置的密码。完成IP配置后，设备将自动重启。

4. 登录设备

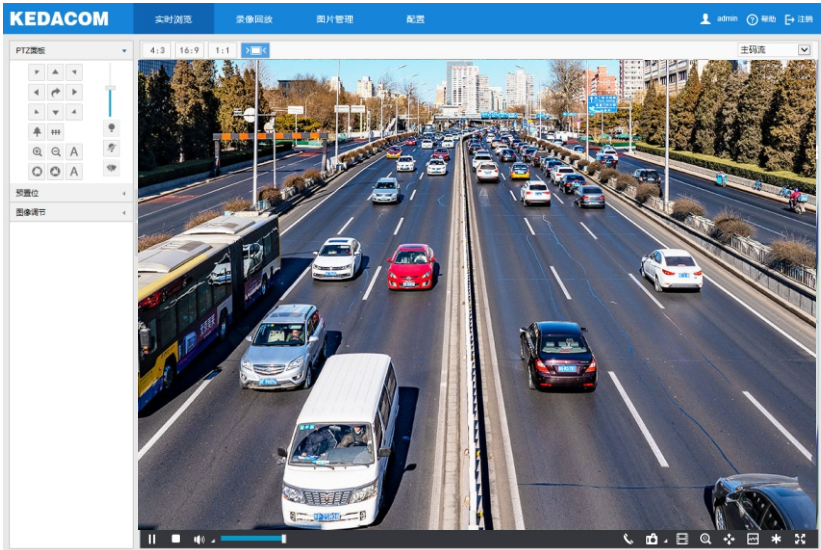
1) 在IPCSearch中双击设备或点击**设备登录**，输入用户名和密码，登录Web客户端；



2) 登录成功后，根据提示下载并安装视频插件；

3) 进入客户端后，便可直接浏览图像。

【说明】不同型号的设备，浏览界面略有差异，请以实际界面为准。更多客户端操作说明请参考客户端帮助文档。



六 快速配置

1. 架设要求

安装时，应确保摄像机的架设符合下述要求：

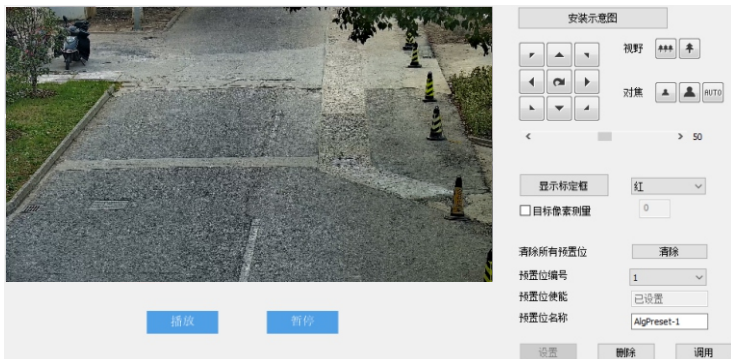
- 摄像机高度应为4m~7m。若架设场景中有较多公交车、卡车等大型车辆通过，建议架设高度在6m以上。
- 摄像机与车辆行驶方向的水平夹角不得大于10°。
- 摄像机俯仰角度应为 10°~15°，推荐俯仰角度为13°。

2. 预置位配置

进入**智能展示>智能配置>预置位配置**界面，点击**安装示意图**，参考安装示意图进行安装配置，步骤如下：

- 1) 安装检查。根据实际的安装环境，并参考架设参数表（详见附件二），选择适宜的安装高度安装摄像机。安装完成后，通过PTZ面板调整摄像机，将摄像机调整至合适的监控位置；

【注意】安装时，可适当调整摄像机的安装高度和角度，以确保摄像机视野中心对准重点抓拍区域。摄像机不得倾斜，需确保画面中人员姿态端正。



The screenshot displays the camera's configuration interface. On the left is a live video feed of a road scene with a motorcycle and traffic cones. On the right is a control panel titled "安装示意图" (Installation Diagram). The panel includes a PTZ control grid, a "视野" (Field of View) section with a "视野" value of 100 and a "对焦" (Focus) section with a "对焦" value of 50. Below these are options for "显示标定框" (Display Calibration Box) set to "红" (Red) and "目标像素测量" (Target Pixel Measurement) set to 0. There are also buttons for "清除所有预置位" (Clear All Presets), "清除" (Clear), and "调用" (Call). At the bottom, there are fields for "预置位编号" (Preset ID) set to 1, "预置位使能" (Preset Enable) set to "已设置" (Set), and "预置位名称" (Preset Name) set to "AlgPreset-1". At the very bottom of the interface are buttons for "设置" (Settings), "删除" (Delete), and "调用" (Call).

2) 视野调节。支持标定框调节和像素调节两种方式调节视野。调节完成后，点击**保存**，设置生效。

标定框调节

- 进入**智能展示>智能配置>预置位配置**界面，选择标定框颜色，点击**显示标定框**，在画面中出现所选颜色的标定框；
- 将50cm×50cm的标定纸板（或车牌）置于画面中央，正对镜头；
- 点击**拉远**或**拉近**按钮，调节视野，改变标定纸板（或车牌）在画面中的大小；标定纸板与较小的标定框重合时，即为最大监控场景；标定纸板与较大标定框重合时，即为最小监控场景。



像素调节

- 进入**智能展示>智能配置>预置位配置**界面，勾选**目标像素测量**，可显示画面中人员的瞳孔间距或车辆的车牌宽度；
- 使人员或车辆处于画面中央；
- 点击**拉远**或**拉近**按钮，调节视野，改变人脸或车牌在画面中的大小，确保瞳孔间距、车牌宽度不低于规定的最小值即可。

【说明】人员卡口系列高清智能网络摄像机仅有像素调节一种方式。通过视野按钮改变画面中人脸的大小来确定瞳孔间距，完成视野调节。

| | |
|-----------|------|
| 摄像机镜头像素 | 800W |
| 车牌宽度 (像素) | >200 |
| 瞳孔间距 (像素) | >40 |



播放

暂停

安装示意图

视野

对焦

< > 50

显示标定框

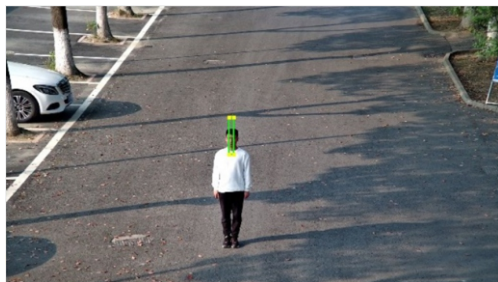
目标像素测量

清除所有预置位

预置位编号

预置位使能

预置位名称



播放

暂停

安装示意图

视野

对焦

< > 50

显示标定框

目标像素测量

清除所有预置位

预置位编号

预置位使能

预置位名称

3) 对焦。摄像机聚焦模式默认为自动聚焦，当且仅当自动聚焦无法获得清晰的图像时，才需进行手动对焦。

【说明】 分辨率大于200W像素的摄像机，需手动绘制聚焦区域。可在预绘制区域中布置人员或放置纹理丰富的物体，以提高对焦精度。

- 1) 进入**配置>摄像机>图像>聚焦**，在聚焦区域下拉框中选择**自定义**，点击**开始绘制**，在画面底部位置绘制重点聚焦区域，绘制完成后，点击**停止绘制**；
- 2) 再点击**设置**，进行自动聚焦。

图像效果



4) 预置位设置。完成以上步骤后，在预置位编号下拉框中选择编号，填写预置位名称，点击**设置**，完成预置位配置；点击**调用**，当前预置位生效并进行智能分析。

【说明】 最多可设置8个预置位。

【注意】 点击**调用**后，当前预置位生效并进行智能分析，同时锁定预置位状态。若在其他界面调节云台或视野，5分钟后摄像机自动恢复到锁定的预置位状态。

3. 标定配置

摄像机预置位配置完成后，才可进行标定配置。若摄像机的高度、俯仰角、焦距等参数发生变化，需重新进行标定配置。

【说明】 人员卡口系列高清智能网络摄像机不支持近景框和远景框的标定。

1) 进入**智能展示>智能配置>标定配置**界面，在预置位下拉框中选择预置位；

2) 标定。摄像机主要用于抓拍车辆时，需参照车牌进行标定；

a) 进入**智能展示>智能配置>标定配置**界面，勾选**启用近景远景框**。当车辆的车牌处于画面中央时，点击**暂停**，调整远景框的大小和位置，使远景框与车牌宽度相同；

【说明】 点击选中框体，拖动框体四角的黄色端点，可调整相应框体的长和宽；长按边框，拖动相应框体，可将其调整到合适的位置。

b) 点击**播放**，当车辆的车牌靠近监控画面的下沿时，点击**暂停**，调整近景框的大小和位置，使近景框与车牌宽度相同。

【说明】 标定过程中，不可进行视野调节，即不可使用拉近、拉远按钮。

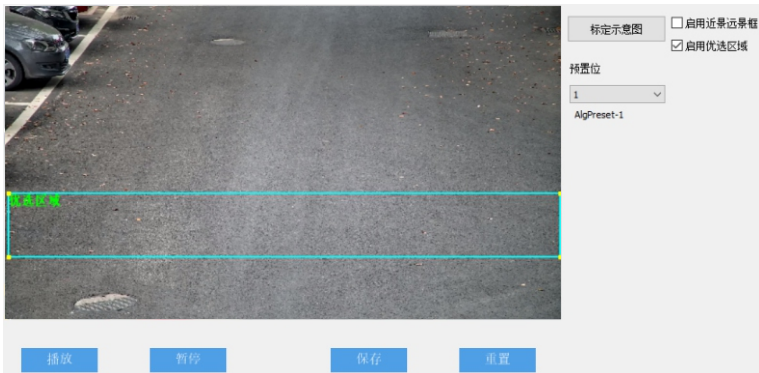


- 3) 优选区域配置。未启用优选区域时，摄像机默认为全画面选优；启用后，当目标经过设置的优选区域后，摄像机将优先输出该区域内抓拍的最佳快照。

【说明】优选区域配置适用于人脸和机动车抓拍。

实际场景中，尤其是夜晚补光灯仅能覆盖部分区域的情况下，需进行优选区域配置，步骤如下：

- 进入**智能展示>智能配置>标定配置**界面，勾选**启用优选区域**，显示优选区域，默认为画面从上至下1/2~3/4处。
- 点击优选区域框，拖动框体四角的黄色端点，可调整优选区域的长和宽；长按蓝色边框，拖动优选区域框体，可将其调整到合适的位置。



- 4) 点击**保存**，参数设置即可生效。

附录一 尾线防水处理

将尾线连接好后，请务必根据以下步骤对尾线做防水处理。

下图仅为示意所用，实际请以连接为准。

- 1) 连接尾线，对所有连接电缆做好绝缘防护，用绝缘胶带整体缠绕。



- 2) 选择缠绕防水胶带起点。



- 3) 用防水胶带对尾线做好防水防护。



附录二 架设参数表

以下为摄像机按推荐俯仰角度架设，即俯仰角为13°时的架设参考数据。

【说明】最佳监控距离，指监控画面中下部与摄像机的水平距离。

| 800W像素 | | | |
|--------|-------|--------|------|
| 架设高度 | 架设俯仰角 | 最佳监控距离 | 监控宽度 |
| 4m | 13° | 7~12m | 7m |
| 5m | 13° | 11~16m | 7m |
| 6m | 13° | 15~20m | 7m |
| 7m | 13° | 19~24m | 7m |

【说明】云台摄像机角度、方向可变，更为灵活，监控范围更广。

附录三 AC 24V线径与传输距离关系表

当线径大小一定, AC 24V电压损耗率低于10%时, 不同传输功率推荐的最大传输距离。(对于AC 24V交流供电设备, 其最大允许电压损耗率为10%。下面表格中所用线缆均为铜线, 铜的电阻率为 $\rho = 0.0175\Omega \cdot \text{mm}^2/\text{m}$)

| 距离m (feet) 功率W \ 线径 mm | 0.8 (20AWG) | 1.0(18AWG) | 1.25(16AWG) | 2.0(12AWG) |
|---------------------------------|-------------|------------|-------------|------------|
| 5 | 122 (401) | 194 (636) | 307 (1008) | 781 (2562) |
| 10 | 61 (201) | 97 (318) | 154 (504) | 391 (1281) |
| 15 | 41 (134) | 65 (212) | 102 (336) | 260 (854) |
| 20 | 31 (100) | 48 (159) | 77 (252) | 195 (641) |
| 25 | 24 (80) | 39 (127) | 61 (202) | 156 (512) |
| 30 | 20 (67) | 32 (106) | 51 (168) | 130 (427) |
| 35 | 17 (57) | 28 (91) | 44 (144) | 112 (366) |
| 40 | 15 (50) | 24 (79) | 38 (126) | 98 (320) |
| 45 | 14 (45) | 22 (71) | 34 (112) | 87 (285) |
| 50 | 12 (40) | 19 (64) | 31 (101) | 78 (256) |
| 55 | 11 (36) | 18 (58) | 28 (92) | 71 (233) |
| 60 | 10 (33) | 16 (53) | 26 (84) | 65 (214) |
| 65 | 9 (31) | 15 (49) | 24 (78) | 60 (197) |
| 70 | 9 (29) | 14 (45) | 22 (72) | 56 (183) |
| 75 | 8 (27) | 13 (42) | 20 (67) | 52 (171) |
| 80 | 8 (25) | 12 (40) | 19 (63) | 49 (160) |
| 85 | 7 (23) | 11 (37) | 18 (59) | 46 (151) |
| 90 | 7 (22) | 11 (35) | 17 (56) | 43 (142) |
| 95 | 6 (21) | 10 (33) | 16 (53) | 41 (135) |
| 100 | 6 (20) | 10 (32) | 15 (50) | 39 (128) |

【备注】 线径要求适用于单根、实心、圆形的铜线, 多股绞线的电缆AWG 值是由所有线的总横截面积决定。

保修说明

本保修卡适用于您购买的本公司系列产品。

- 1.免费保修期一年（仅限中国大陆地区，中国大陆以外地区请参考英文说明）。
- 2.凡保修期内，由于本产品自身引起的故障，请与公司售后服务部联系。
- 3.保修时我们将使用您的保修卡信息，请认真填写。
- 4.以下情况，属于有偿保修范围：
 - 人为原因造成的设备故障
 - 因使用环境不符合本产品要求造成的故障
 - 因不可抗力造成的产品损坏
 - 无保修卡
 - 已过免费保修期

用户信息

用户名称：

详细地址：

传真：

电话：

邮箱：

邮编：

产品名称：

产品型号：

购买日期：

I. Preface

Thank you for purchasing our product. If there are any questions, or requests, please do not hesitate to contact us.

The intention of writing this Guide is to ensure that user can use the product correctly to avoid danger or property loss. Please read this Guide carefully before using, and keep it properly for future reference. If the product cannot work normally or is damaged because the user does not follow the safety instructions, we shall not assume any responsibility. Your cooperation will be highly appreciated.

II. Safety Instruction

1. Power Supply

- During installing and using the device, please follow local electrical safety regulations strictly.
- Please use power supply in the safe voltage range of our product. Make sure if the power supply is correct before running the device.
- Please install an easy-to-use breaker during installation and wiring in case it is necessary to make an emergency break.
- Please prevent the power cord from being trampled or pressed especially the plug, socket and the connecting part led out from the device.
- Please connect cables of power, alarm, audio and RS-485 with the power off. Hot-line wiring is not allowed.

2. Working Environment

- Do not focus the camera lens on strong light such as the sun or incandescent lamp; otherwise the strong light will cause overexposure or light leak (not camera malfunction), which may shorten camera lifetime.
- Please transport, use and store the device within defined humidity and temperature ranges.
- Do not expose it in damp, dusty, extremely hot or cold places or places with intense electromagnetic radiation or with unstable lighting.
- Keep the camera away from water or any liquid to avoid damage to internal components.
- To avoid heat accumulation, please do not block the ventilation around the device.
- While shipping the camera, pack it in the factory packing or use materials with equivalent quality.
- When shipping, storing and installing the device, try to prevent it from damages caused by pressure, violent vibration and shaking.
- Please do not install the device on unstable bracket, wall or roof; otherwise it may damage people and the device.

| Working Environment | |
|---------------------|----------------------------------|
| Voltage | AC24V±10%, 4A |
| Condition | Lightning protection, Anti-surge |
| Altitude | 2 km |
| Temperature | -40°C~+70°C |
| Humidity | 10%~95% (non-condensing) |

3. Daily Maintenance

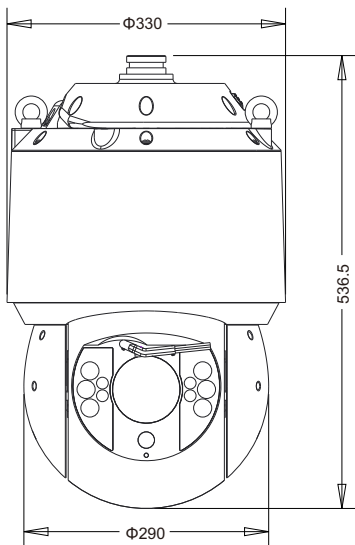
- Do not touch the heat component of the device directly to avoid empyrosis.
- When the glass surface of the lens is contaminated by dust or grease, use cotton cloth or lens clean cloth to wipe it off. When it is hard to clean, dip some lens cleanser and wipe gently and rotate outward from the middle until it is clean. Never apply any organic solvent with ethanol or benzene to clean the lens and housing.
- Do not disassemble or repair the device in any way by yourself. We shall not assume any responsibility for problems caused by unauthorized operations.
- If the product does not work properly, please contact your dealer or the nearest service center.

4. Special Statement

- The product appearance is subject to the actual device and picture in this Guide is for reference only.
- Every effort has been made to ensure the accuracy and validity of this Guide. Any update of this Guide caused by version upgrade is subject to change without notice. This Guide is made for multiple models but due to limited space, it will not illustrate all models one by one. Please refer to it according to the actual products you are using.
- This device can be used after being activated through IPCSearch (download it from our website: <https://www.kedacom.com/cn/softtools/index.jhtml>). During activation please fill a valid email address for finding back the password. To ensure the safety of device on internet, it is strongly recommended that you set a strong password which is composed of at least 2 kinds of the following, digits, case-sensitive letters or specific symbols, and whose length ranges from 8 to 16 bits. Please modify the password periodically and once every 3 months is recommended. If the device is used in highly risky environment, suggest modifying the password monthly or weekly. Please keep your user name and password safe.
- For the latest files, please download from our website www.kedacom.com.

III Appearance

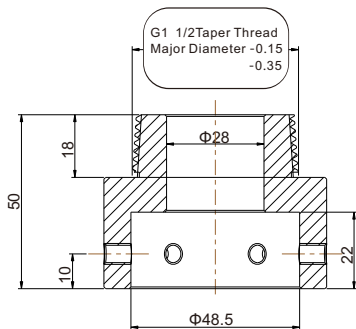
Dimensions of Camera:



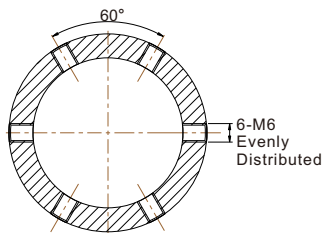
Unit: mm

Net weight: 18.5 KG

Dimensions of Adaptor Ring:



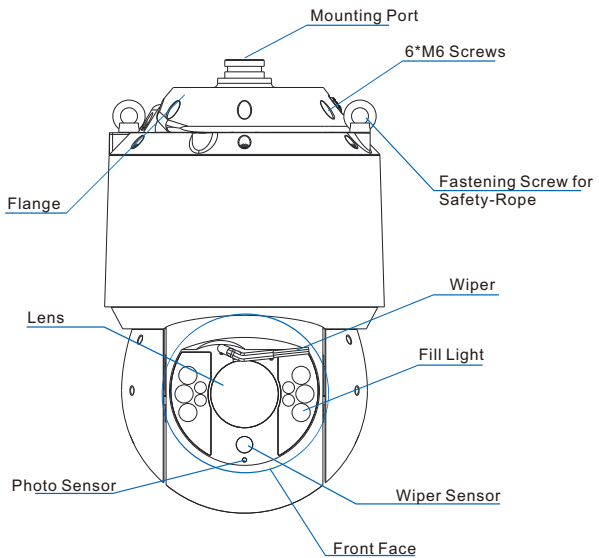
Profile View

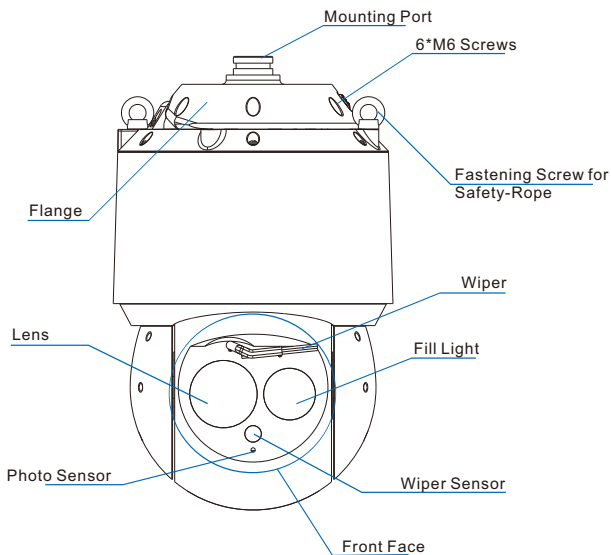


Bottom View

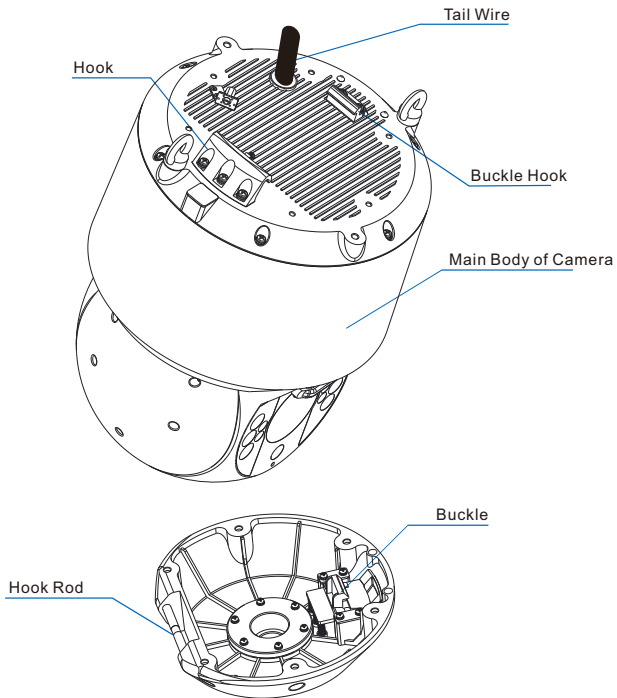
Unit: mm

Components

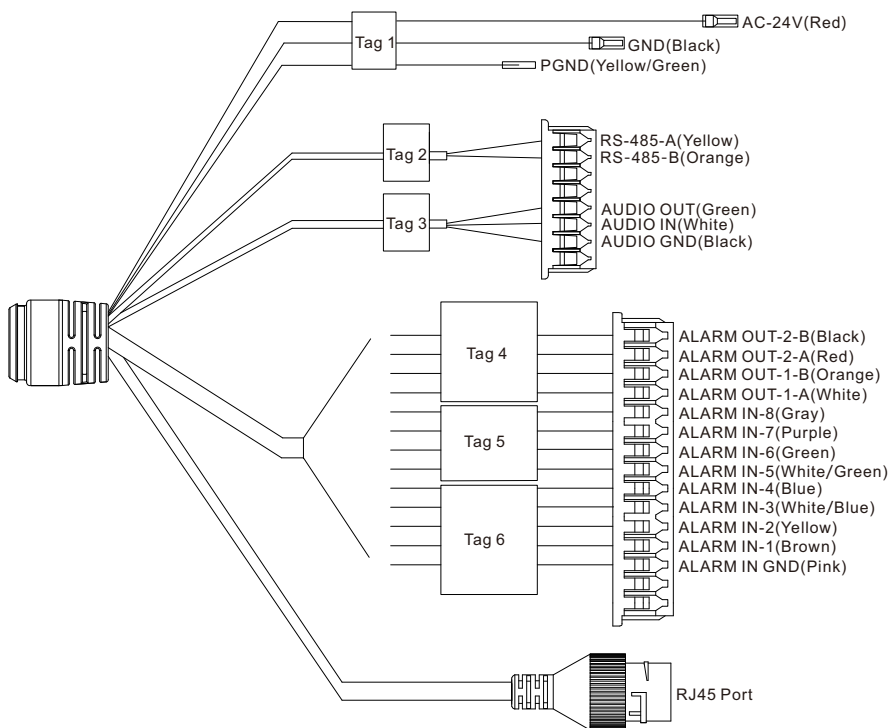




[Note]: There are IR and white-light sub-models of the camera, whose lenses and fill lights on the front face are different. Please subject to the actual models. This manual will take the IR type as an example to introduce the installation steps.



Tail Wire



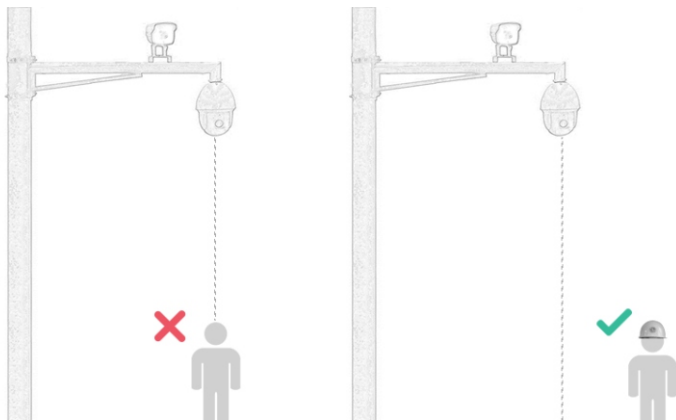
| Tag | Color | Function | Group | No. |
|---------------|--------------|--|-------|-----|
| AC-24V | Red | Power supply, connect to AC24V | 1 | - |
| PGND | Yellow/Green | Protective grounding | | - |
| GND | Black | Power grounding | | - |
| RS-485-A | Yellow | RS-485 serial port, connect to external devices for control such as controlling a third-party device | 2 | 1 |
| RS-485-B | Orange | | | 2 |
| AUDIO OUT | Green | Audio output, output audio signal; connect to loudspeaker | 3 | 5 |
| AUDIO IN | White | Audio input, input audio signal; connect to sound pick-up | | 6 |
| AUDIO GND | Black | Audio grounding | | 7 |
| ALARM OUT-2-B | Black | Alarm output, output alarm signal, regardless of positive or negative poles; connect to alarm light | 6 | 15 |
| ALARM OUT-2-A | Red | | | 14 |
| ALARM OUT-1-B | Orange | | | 13 |
| ALARM OUT-1-A | White | | | 12 |
| ALARM IN-8 | Gray | Alarm input, input alarm signal; connect to voice-operated switch and etc. | 5 | 11 |
| ALARM IN-7 | Purple | | | 10 |
| ALARM IN-6 | Green | | | 9 |
| ALARM IN-5 | White/Green | | | 8 |
| ALARM IN-4 | Blue | | 4 | 7 |
| ALARM IN-3 | White/Blue | | | 6 |
| ALARM IN-2 | Yellow | | | 5 |
| ALARM IN-1 | Brown | | | 4 |
| ALARM IN GND | Pink | Alarm input grounding port | | 3 |
| RJ45 Port | - | RJ45 port, connect to network device, support adaptive | - | - |

[Note] ALARM IN-N and ALARM IN GND should be used in pair.

IV. Installation

1. Safety Instructions

- Make sure there is enough space for mounting the camera and its accessories.
- Make sure the wall or cross-bar can bear as heavy as 8 times of the total weight of the camera and the accessories (device weight: 18.5 kg). The bracket has enough rigidity to prevent the device from shaking in heavy wind.
- There should be no obstacles surrounding the lens.
- When user selects bracket of his own choice, suggest the one with internal thread connector and meanwhile ensure the waterproofness of the bracket.
- On roads without height limits, the suggested installation height of the camera should be higher than 5m so as to reduce friction to the camera.
- To prevent the device from dropping, the camera must be installed with a safety rope during installation.
- During installation, no man shall be allowed to move around in 2 m under the camera, and all men should wear a safety helmet.



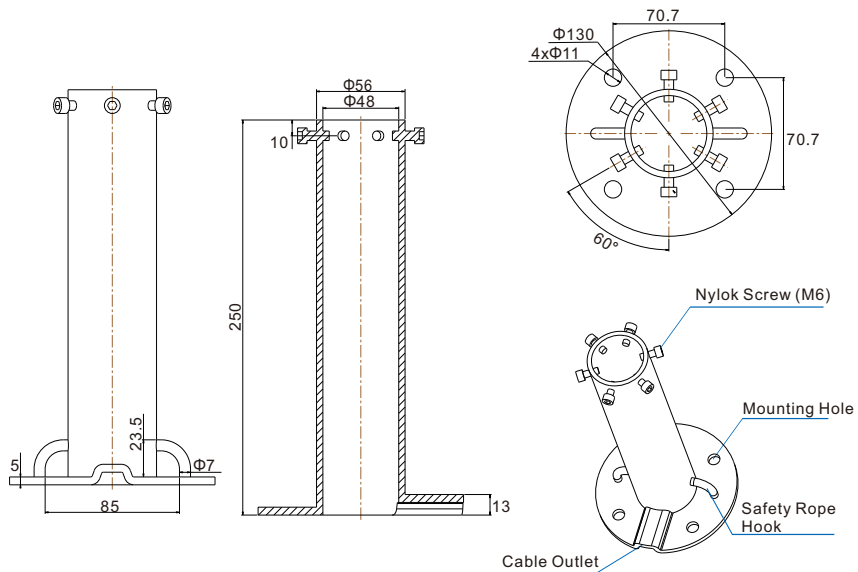
2. Installation Method

The camera supports ceiling bracket mount, wall bracket mount and adaptor ring mount.

[Note]: All brackets are optional.

Ceiling Bracket Mount

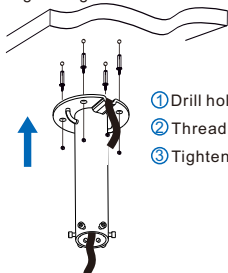
Dimensions of the optional ceiling bracket of this company:



Unit: mm

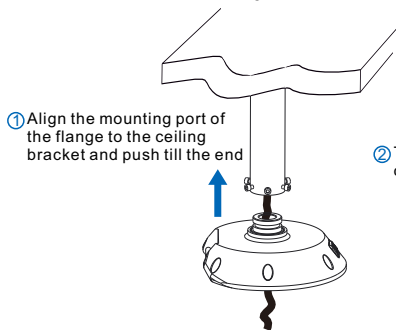
- Installation steps:

- 1) Remove the 6 flange screws of M6 to uninstall the flange from the camera body.
- 2) Mark the installation holes on the ceiling according to the holes on the ceiling bracket, drill 4 holes with depth of 60 mm, and insert the expansion screw anchors (M8) into the holes.
- 3) Thread cables out of the bracket through the cable outlet and reserve a length long enough for connecting to the cables inside the camera.
- 4) Fix the bracket onto the ceiling and tighten the hex nuts.

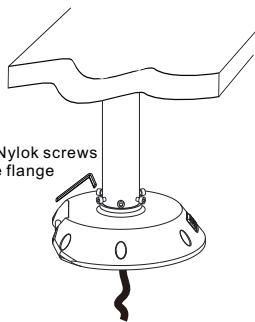


- ① Drill holes and insert expansion screw anchors into the ceiling
- ② Thread cables out of the bracket through the cable outlet
- ③ Tighten the hex screws to fix bracket

- 5) Align the mounting port of the flange to the ceiling bracket and push till the end, and tighten the 6 Nylok screws of M6 on the bracket to fix the flange.



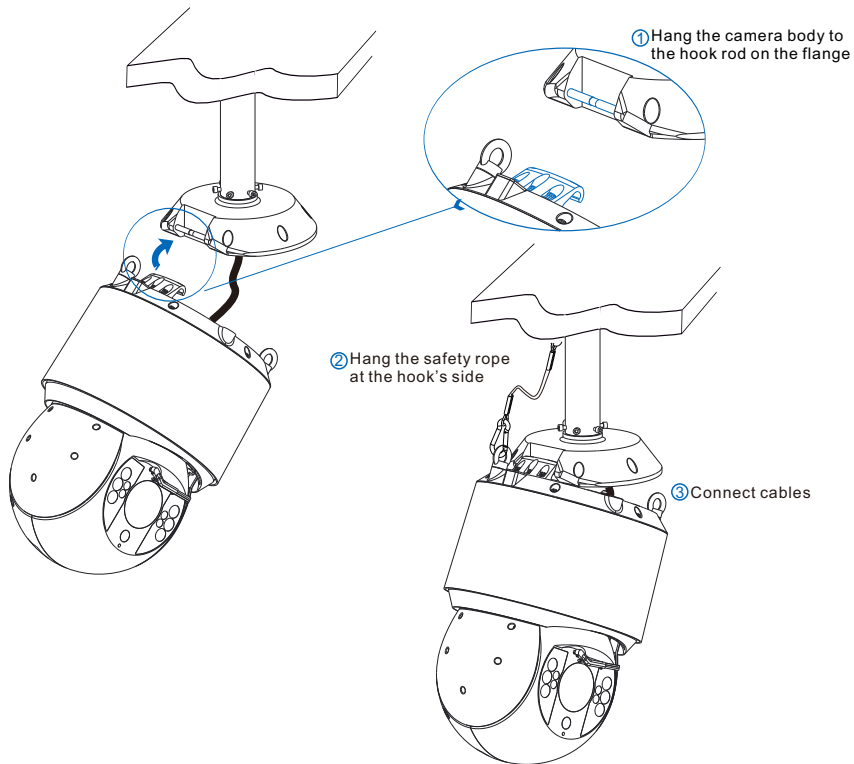
- ① Align the mounting port of the flange to the ceiling bracket and push till the end



- ② Tighten the 6 Nylok screws of M6 to fix the flange

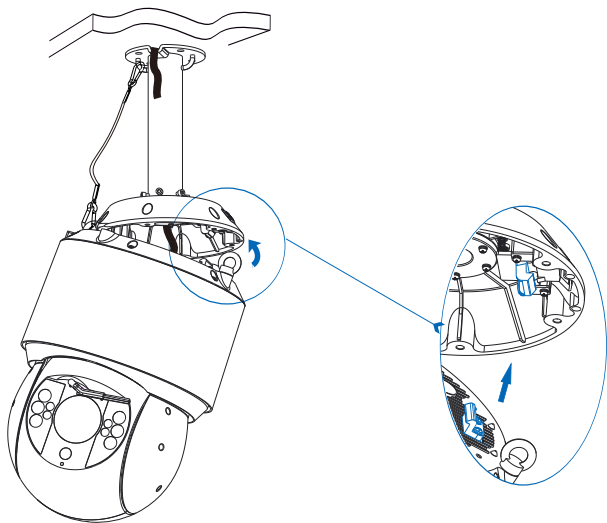
[Note] To avoid shaking of the camera, please make sure the 6 Nylok screws are tightly fastened.

- 6) Hang the camera body to the hook rod on the flange, and hang one end of the safety rope onto the safety rope screw and hang the other end onto the safety rope hook on the ceiling bracket. Connect cables.

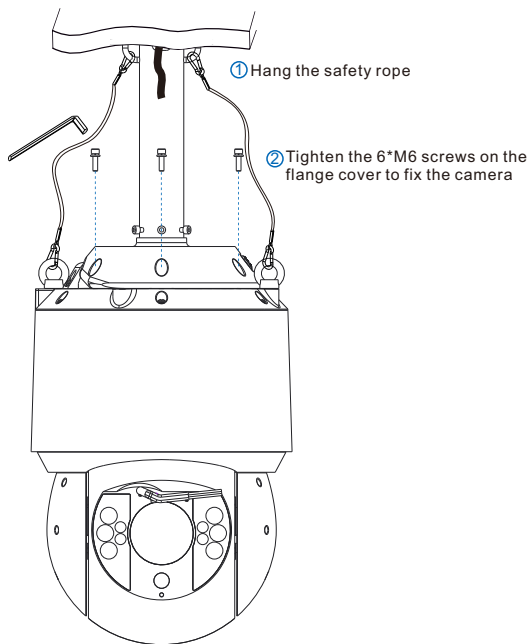


[Note] While connecting the tail wires, make good waterproof treatment to them. For operation steps, please refer to the Appendix.

7) Lift the camera body up to lock it with the flange buckle.



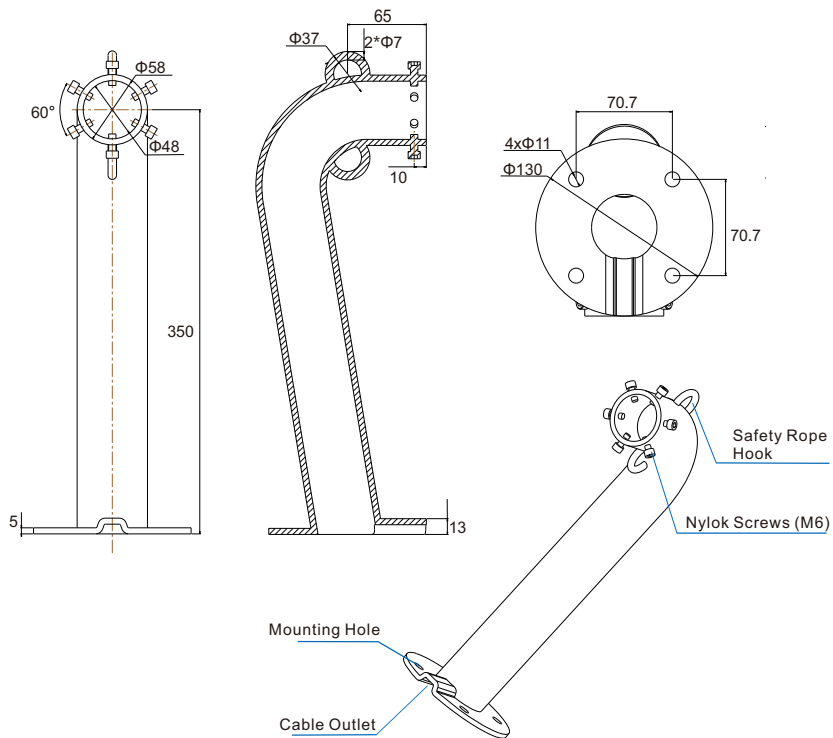
- 8) Hang one end of the safety rope onto the fastening screw on the buckle and the other end onto the safety rope hook on the bracket. Tighten the flange screws to fix the camera.



- 9) After finishing installation, power on the device.

Wall Bracket Mount

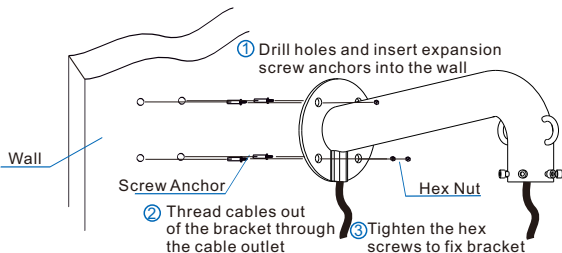
Dimensions of the optional wall bracket of this company:



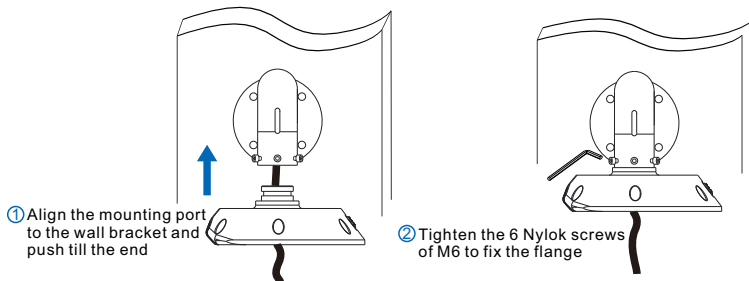
Unit: mm

• Installation steps:

- 1) Remove the 6 flange screws of M6 to uninstall the flange from the camera body.
- 2) Mark the installation holes on the wall according to the holes on the wall bracket, drill 4 holes with depth of 60 mm, and insert the expansion screw anchors (M8) into the holes.
- 3) Thread cables out of the bracket through the cable outlet and reserve a length long enough for connecting to the cables inside the camera.
- 4) Fix the wall bracket onto the wall and tighten the hex nuts.

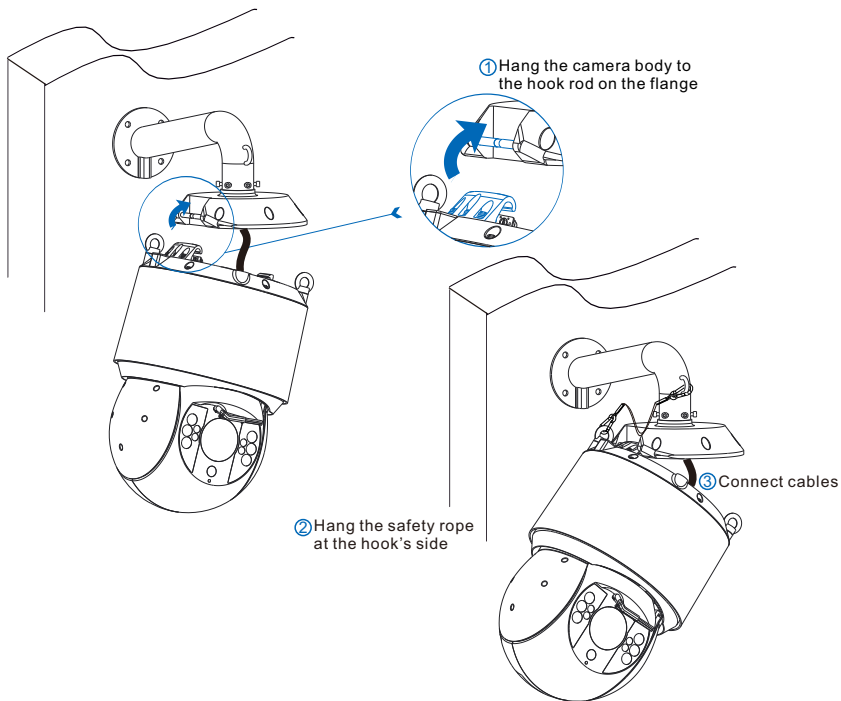


- 5) Align the mounting port to the wall bracket and push till the end, and tighten the 6 Nylok screws of M6 on the wall bracket to fix the flange.



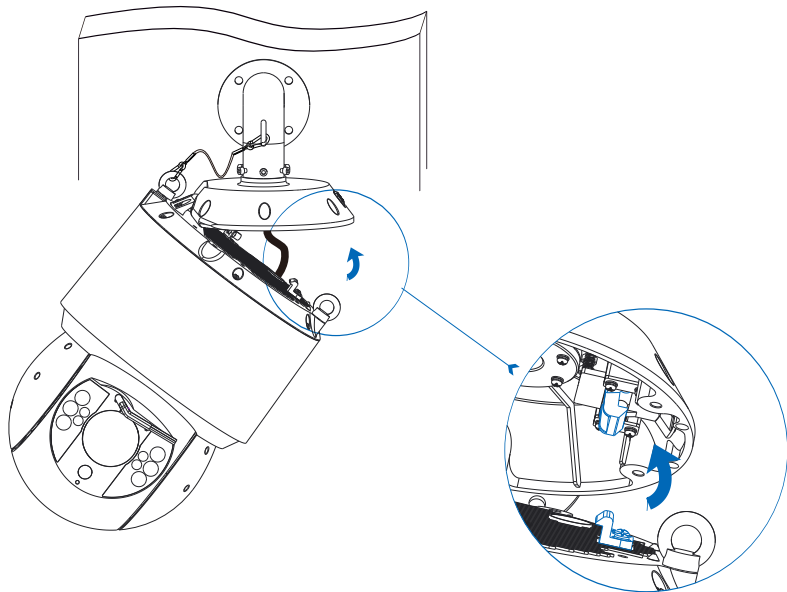
[Note] To avoid shaking of the camera, please make sure the 6 Nylok screws are tightly fastened.

- 6) Hang the camera body to the hook rod on the flange, and hang one end of the safety rope onto the safety rope screw and hang the other end onto the safety rope hook on the wall bracket. Connect cables.

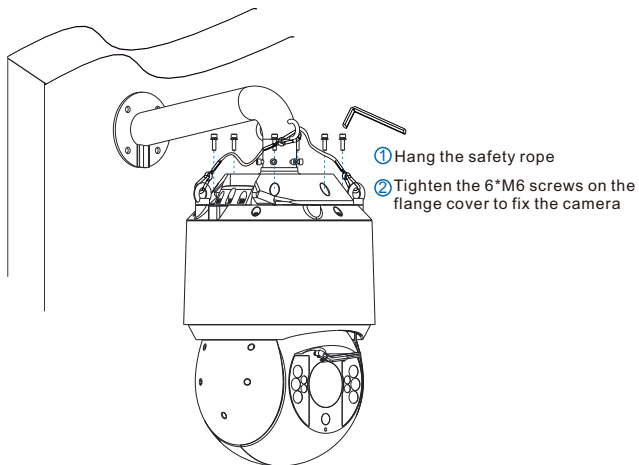


[Note] While connecting the tail wires, make good waterproof treatment to them. For operation steps, please refer to the Appendix.

7) Lift the camera body up to lock it with the flange buckle.



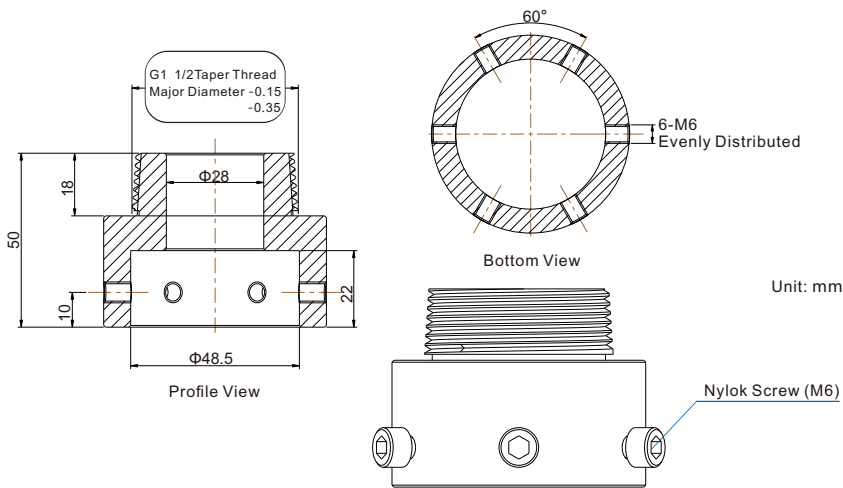
- 8) Hang one end of the safety rope onto the fastening screw on the buckle and the other end onto the safety rope hook on the bracket. Tighten the flange screws to fix the camera.



- 9) After finishing installation, power on the device.

Adaptor Ring Mount

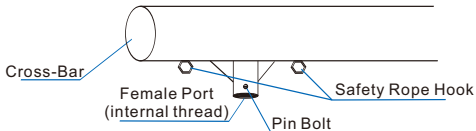
Dimensions of adaptor ring:



The adaptor ring is used when user selects a self-made bracket with internal thread. The following will take a cross-bar as an example.

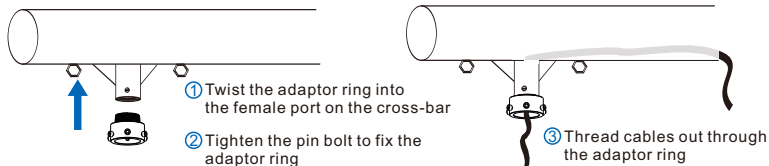
- Installation steps:

- 1) Prepare a cross-bar welded with a female port (internal thread), and mount a pin bolt 8-10 mm from the female port.

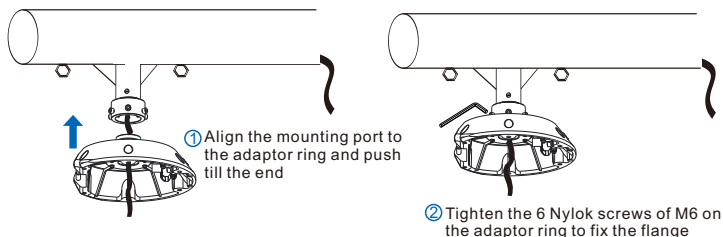


[Note] The self-made bracket by user must have a pin bolt and a safety rope hook.

- 2) Twist the adaptor ring into the female port on the cross-bar and tighten the pin bolt to fix the adaptor ring.
- 3) Thread cables out through the adaptor ring and reserve a length long enough for connecting to the cables inside the camera.

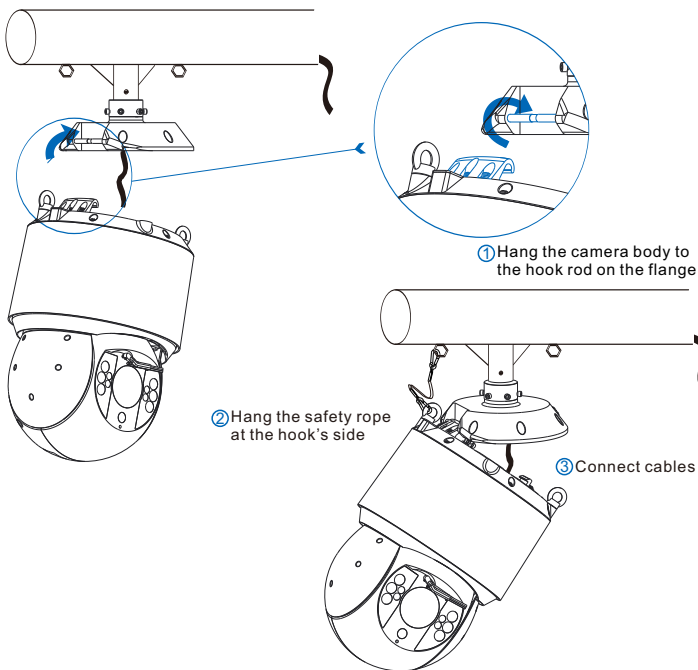


- 4) Remove the 6 flange screws of M6 to uninstall the flange from the camera body.
- 5) Align the mounting port to the adaptor ring and push till the end, and tighten the 6 Nylok screws of M6 on the adaptor ring to fix the flange.



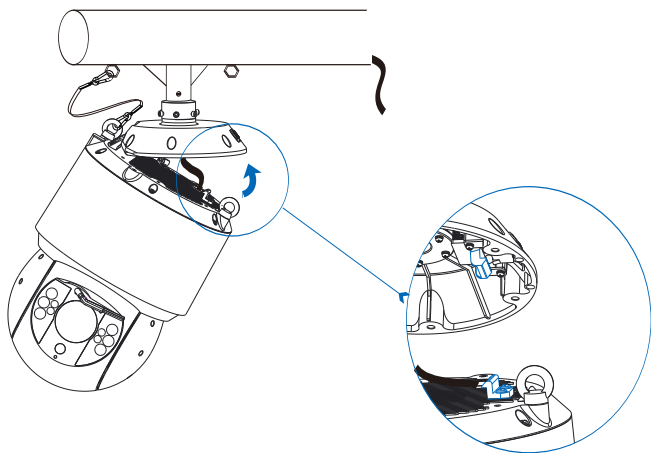
[Note] To avoid shaking of the camera, please make sure the 6 Nylok screws are tightly fastened.

- 6) Hang the camera body to the hook rod on the flange, and hang one end of the safety rope onto the safety rope screw and hang the other end onto the safety rope hook on the wall bracket. Connect cables.

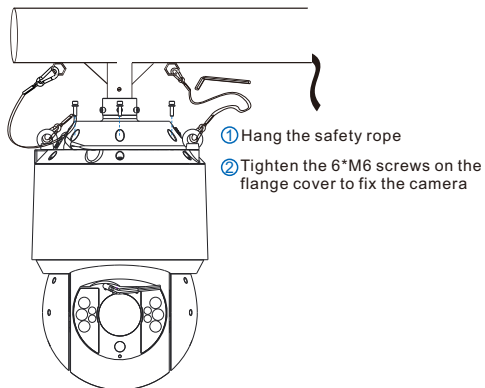


[Note] While connecting the tail wires, make good waterproof treatment to them. For operation steps, please refer to the Appendix.

7) Lift the camera body up to lock it with the flange buckle.



- 8) Hang one end of the safety rope onto the fastening screw on the buckle and the other end onto the safety rope hook on the bracket. Tighten the flange screws to fix the camera.



- 9) After finishing installation, power on the device.

V. Login to the Web Client

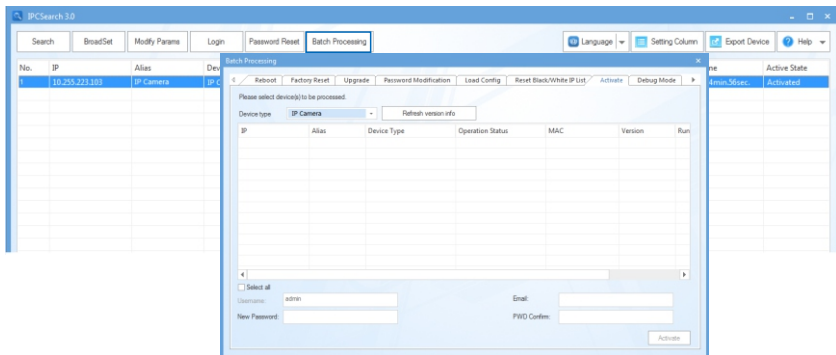
1. Minimum system configuration of PC and environment requirements:

- Processor: Intel® CORE™ i5-7500 or other processors with the same or better performance
- Graphics Card: Intel® HD Graphics 630 or other cards with the same or better performance
- RAM Memory: 8GB or above
- Operating System: Windows 7 or later
- Browser (32-bit): 360 browser, IE 11.0 and higher versions, Firefox (51.0 and lower versions), Google Chrome (41.0 and lower versions)
- Webpage Plug-in: Hard decoded plug-in
- DirectX : 9.0c


2. Device Activation

When using the device for the first time, run IPCSearch and it will search devices in LAN automatically and display the list of device IP address, gateway and etc. If the network provides DHCP service, DHCP server will assign IP for the camera automatically.

- Batch: Select the device and click "**Batch processing**". In the popup interface, set admin user's password and the email address to find back the password. Click "**Activate**" and wait for rebooting.
- Individual: Select the device from IPCSearch and right click to select "**Active**". Fill admin user name and password and the e-mail address to find back the password. Click "**Activate**" and wait for rebooting.
- Web client: the device can also be activated through the web client. Set PC and the device in the same network segment and login to the web. User can set admin password and password reset email on the interface and click "**Activate**".



Login



admin

password

Weak Strong

Please choose a password with 8-16 characters. Your password must also contain two or more combinations of upper and lowercase letters, numbers, and symbols.

When admin's password gets lost, find it back through this email. Please sure this email address is safe and valid.

Active

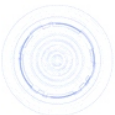
3. Modify Device IP Address

Click **Modify Params** and set the network parameters. When configuring a static IP for the camera, please check **Custom device address (Close DHCP)** and fill the Ethernet parameter. During the modification, the user name (admin) and the password set before activation should be entered. After configuration, the camera will reboot automatically.

4. Login to the Device

- 1) Double click the device in IPCSearch or click **Login**. Enter user name and password to login the web client.
- 2) After login, download and install the plug-in.
- 3) Re-login to the web client and view live video directly.

Login



admin

password

Login

[Note]: Interface of different models may differ. Please subject to the actual products. Please refer to the *Help* file for detailed explanation.



VI Quick Settings

1. Installation Requirements

Before installation, make sure the installation of camera meets the following requirements:

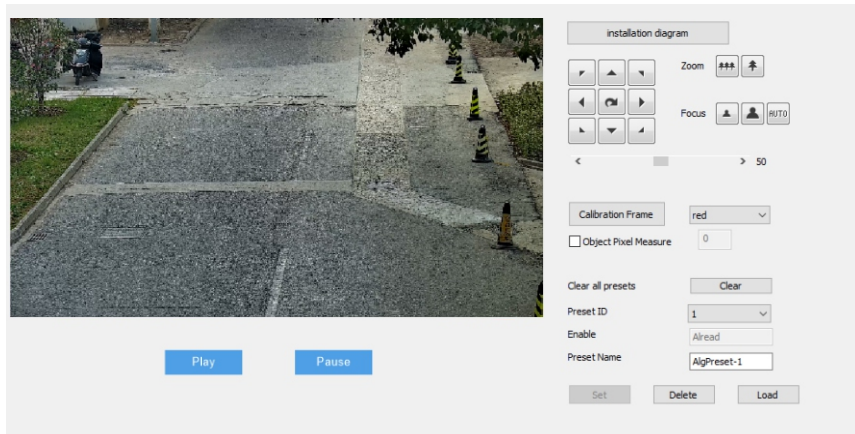
- The installation height of the camera should be in the range of 4 m to 7 m. If there are many buses and trucks passing through in the scene, recommend installing the camera over 6 m.
- The horizontal angle between the camera and the vehicle direction should not be larger than 10° .
- The camera angle of pitch should be in the range of 10° to 15° , and 13° is recommended.

2. Preset Configuration

Go to **Intelligent > Settings > Install**. Click "**Installation Diagram**" and configure according to the installation diagram, steps as follows:

- 1) Installation examination. Select proper installation height for the camera according to the actual environment and the Appendix: Reference of Installation Parameters. After finish installation, adjust the camera to proper angles through the PTZ control buttons on live view interface.

[Attention] During installation, you can adjust camera installation height and angles properly to make sure the camera lens is facing rightly to the key surveillance area. The camera cannot be slanted so as to make sure the person in the picture stands upright.



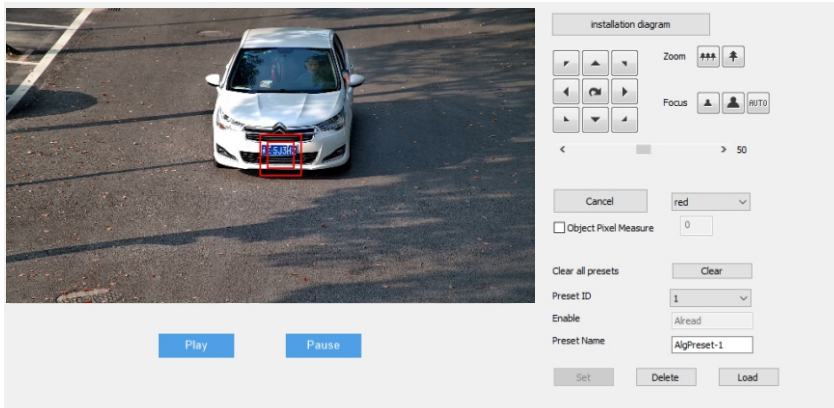
The screenshot displays the camera installation diagram interface. On the left, a live video feed shows a road scene with a motorcycle and traffic cones. Below the feed are two blue buttons labeled "Play" and "Pause". On the right, the control panel includes:

- A tab labeled "installation diagram".
- PTZ control buttons: a 3x3 grid of directional arrows, a "Zoom" section with a minus sign, a plus sign, and a vertical arrow, and a "Focus" section with a plus sign, a person icon, and a "AUTO" button.
- A horizontal slider with a value of 50.
- A "Calibration Frame" dropdown menu set to "red".
- An "Object Pixel Measure" checkbox and a text input field with the value "0".
- A "Clear all presets" section with a "Clear" button.
- A "Preset ID" dropdown menu set to "1".
- An "Enable" dropdown menu set to "Always".
- A "Preset Name" text input field containing "AlgPreset-1".
- Bottom control buttons: "Set", "Delete", and "Load".

- 2) Adjust camera field of view. There are 2 methods, calibration frame adjustment and pixel adjustment. After finishing adjustment, click **"Save"** to validate settings.

Calibration frame adjustment:

- Go to **Intelligent > Settings > Install**, select calibration frame color and click "Calibration Frame" to show the calibration frame in the selected color;
- Put the calibration board (or vehicle plate) sized 50 cm * 50 cm in the center of the image facing the lens;
- Click icons of **"Zoom in"** or **"Zoom out"** to adjust the field of view and change the size of the calibration board (or vehicle plate) in the image; when the calibration board coincides with the smaller frame, it is the maximum scene; when the calibration board coincides with the larger frame, it is the minimum scene.




Pixel adjustment:

- Go to **Intelligent > Settings > Install**, select **"Object Pixel Measure"** to show the interpupillary distance (IPD) of the person or show the width of the vehicle plate in the image;
- Make the person or the vehicle in the center of the image;
- Click icons of **"Zoom in"** or **"Zoom out"** to adjust the field of view and change the size of human face or vehicle plate to ensure the IPD or the plate width is no less than the specified minimum value.

[Note]: The intelligent speed dome camera for human checkpoint have only one kind of method, i.e. pixel adjustment. Adjust the field of view to change the size of human face so as to determine the IPD and finish adjustment of field of view.

| | |
|---------------------|--------|
| Camera Lens (pixel) | 8.0 MP |
| Plate Width (pixel) | > 200 |
| IPD (pixel) | > 40 |



Play
Pause

Installation diagram

Zoom

⏪ ⏩

Focus

⏪ ⏩

< 50 >

Calibration Frame: red

Object Pixel Measure: 230


Clear all presets: Clear

Preset ID: 1

Enable: Already

Preset Name: AlpPreset-1

Set
Delete
Load



Play
Pause

Installation diagram

Zoom

⏪ ⏩

Focus

⏪ ⏩

< 50 >

Calibration Frame: red

Object Pixel Measure: 42

Clear all presets: Clear

Preset ID: 1

Enable: Already

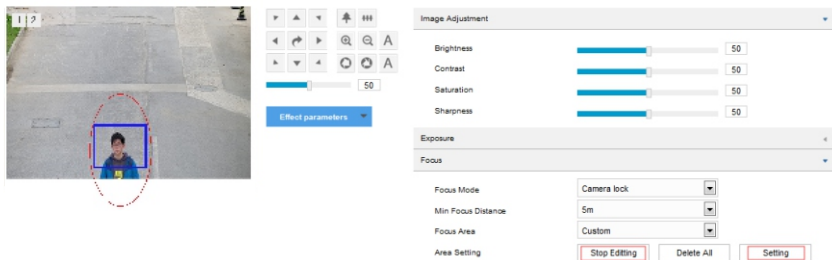
Preset Name: AlpPreset-1

Set
Delete
Load

- 3) **Focusing.** The default focus mode of the camera is auto. Only when auto focusing cannot obtain clear images should user focus manually.

[Note]: When the camera resolution is above 2.0 MP, you need to edit the focus area manually. You can arrange a person or put a richly-textured object in the edit area so as to improve focus accuracy.

- 1) Go to **Settings > Camera > Image > Focus**, select **"Custom"** for Focus Area and click **"Edit"** to edit key focusing area at the bottom of the image. After finish editing, click **"Stop Editing"**.
- 2) Click **"Setting"** to focus automatically.



The screenshot displays the camera's image adjustment and focus settings interface. On the left, a live video feed shows a person in a blue shirt, with a red dashed oval indicating the current focus area. To the right of the video is a control panel with various icons and a slider set to 50, with a blue button labeled "Effect parameters". On the far right, the "Image Adjustment" panel is open, showing sliders for Brightness, Contrast, Saturation, and Sharpness, all set to 50. Below this is the "Exposure" section, with the "Focus" dropdown menu expanded to show "Camera lock", "5m", and "Custom" options. At the bottom of the focus settings, there are three buttons: "Stop Editing", "Delete All", and "Setting".

- 4) **Preset setting.** After finish the above steps, select a preset number from the dropdown list, enter preset name and click **"Save"** to finish preset setting; click **"Load"** to validate current preset and perform intelligent analysis.

[Note] It supports maximum 8 preset positions.

[Attention]: After click "Load", current preset takes effect and perform intelligent analysis and meanwhile its status is locked. If you adjust the PTZ or camera field of view on other interfaces, the camera will restore to locking status automatically in 5 minutes.

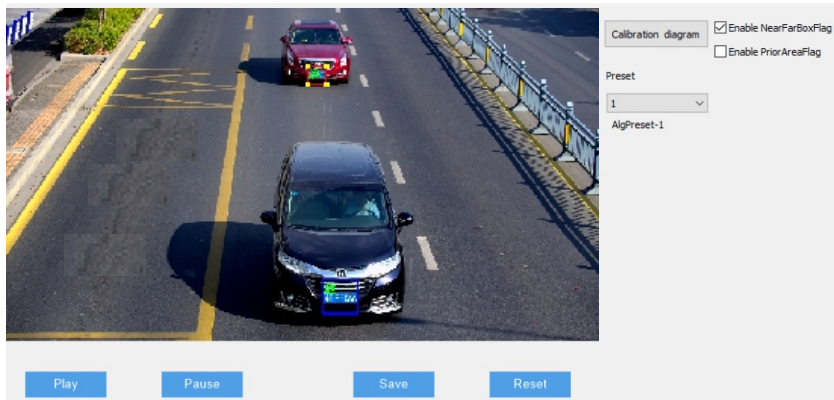
3. Calibration

After finishing preset setting, perform calibration settings. If the camera height, angle of pitch or focal length changes, user needs to calibrate again.

[Note] The intelligent speed dome camera for human checkpoint does not support “Near Far Box Flag” calibration.

- 1) Go to **Intelligent > Settings > Calibration** and select a preset number from the dropdown list.
- 2) Calibrate. When the camera is used to capture vehicle plates, calibrate by referring to the vehicle plate.
 - a) Go to **Intelligent > Settings > Calibration**, and select “**Enable NearFarBoxFlag**”. When the vehicle plate is in the center of the image, click “**Pause**”. Adjust the size and position of the “Far” box to make it the same width as that of the plate;
[Note] Click to select the box and drag the 4 yellow points at the corners to adjust the length and width of it; long-press on the box to select it and drag it to proper positions.
 - b) Click “**Play**” and when the vehicle plate comes to the bottom of the image, click “**Pause**”. Adjust the size and position of the “Near” box to make it the same width as that of the plate;

[Note] During calibration, do not adjust the field of view, i.e. do not click the zoom in or zoom out icons.



The screenshot displays a camera view of a road with two vehicles. A dark grey car is in the foreground, and a red car is further ahead. The interface includes a control panel on the right with the following elements:

- Calibration diagram** (checkbox)
- Enable NearFarBoxFlag**
- Enable PriorAreaFlag**
- Preset** dropdown menu showing **1**
- AlgPreset-1**

At the bottom of the interface, there are four blue buttons: **Play**, **Pause**, **Save**, and **Reset**.

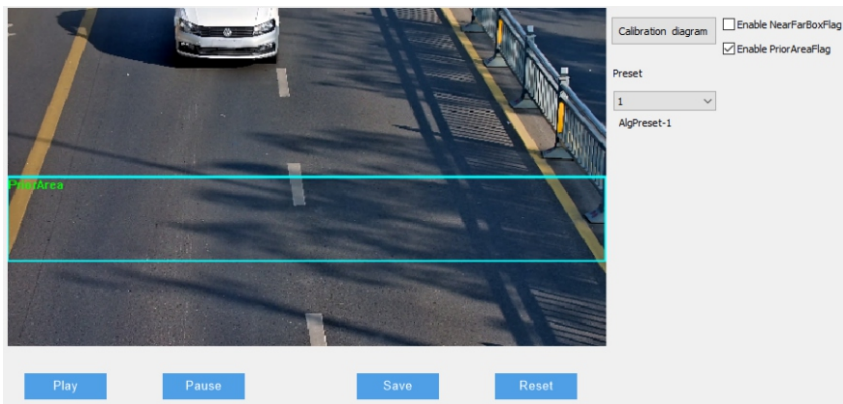
- 3) Configure prior area. When “Enable Prior Area Flag” is unselected, the default prior area of the camera is full area; after selecting “Enable Prior Area Flag”, when an object enters the prior area, the camera will output the optimum snapshots in this area first.

[Note] Prior area configuration is used to capture human face and vehicles.

In actual scenes, especially when the supplementary light at night can only cover partial area, prior area configuration is necessary. The configuration steps are as follows:

- Go to **Intelligent > Settings > Calibration**, and select “**Enable Prior Area Flag**” to display the prior area. The default prior area is 1/2 to 3/4 part from the top of the image.
- Click the prior area frame and drag the yellow points at the corners to adjust the length and width of the area; long-press on the blue lines of the frame and drag the frame to move it to a proper position.

- 4) Click “**Save**” to validate settings.



Appendix I: Waterproof Treatment to the Tail Wires

After the tail wires are connected, make waterproof treatment to them according to the following steps. The following pictures are for reference only.

- 1) Connect the tail wires and make insulation protection over all wires by binding them with insulating tape.



- 2) Select a start point for waterproof tape.



- 3) Make waterproof treatment to the tail wires with waterproof tape.



Appendix II: Reference of Installation Parameters

The following table is the reference parameters when installing the camera at the recommended angle of pitch, i.e. 13°.

[Note] Optimum surveillance distance means the horizontal distance between the lower middle part of the image and the camera.

| 8.0 MP | | | |
|---------------------|----------------|-------------------------------|--------------------|
| Installation Height | Angle of Pitch | Optimum Surveillance Distance | Surveillance Width |
| 4 m | 13° | 7~12 m | 7 m |
| 5 m | 13° | 11~16 m | 7 m |
| 6 m | 13° | 15~20 m | 7 m |
| 7 m | 13° | 19~24 m | 7 m |

[Note] The angle and lens direction of PTZ camera are variable, which makes it flexible and enables larger surveillance scope.

Appendix III: AC 24V Wire Diameter VS. Transmission Distance

The recommended max transmission distance when the wire diameter is certain and the AC24V voltage loss rate is less than 10%

(For AC24V powered devices, the maximum allowed voltage loss rate is 10%. All the wires in the following table are cooper wires, whose electrical resistivity is $\rho = 0.0175\Omega \cdot \text{mm}^2/\text{m}$)

| Distance m (feet) Power W | 0.8 (20AWG) | 1.0(18AWG) | 1.25(16AWG) | 2.0(12AWG) |
|------------------------------------|---------------|-------------|--------------|--------------|
| 5 | 122 (401) | 194 (636) | 307 (1008) | 781 (2562) |
| 10 | 61 (201) | 97 (318) | 154 (504) | 391 (1281) |
| 15 | 41 (134) | 65 (212) | 102 (336) | 260 (854) |
| 20 | 31 (100) | 48 (159) | 77 (252) | 195 (641) |
| 25 | 24 (80) | 39 (127) | 61 (202) | 156 (512) |
| 30 | 20 (67) | 32 (106) | 51 (168) | 130 (427) |
| 35 | 17 (57) | 28 (91) | 44 (144) | 112 (366) |
| 40 | 15 (50) | 24 (79) | 38 (126) | 98 (320) |
| 45 | 14 (45) | 22 (71) | 34 (112) | 87 (285) |
| 50 | 12 (40) | 19 (64) | 31 (101) | 78 (256) |
| 55 | 11 (36) | 18 (58) | 28 (92) | 71 (233) |
| 60 | 10 (33) | 16 (53) | 26 (84) | 65 (214) |
| 65 | 9 (31) | 15 (49) | 24 (78) | 60 (197) |
| 70 | 9 (29) | 14 (45) | 22 (72) | 56 (183) |
| 75 | 8 (27) | 13 (42) | 20 (67) | 52 (171) |
| 80 | 8 (25) | 12 (40) | 19 (63) | 49 (160) |
| 85 | 7 (23) | 11 (37) | 18 (59) | 46 (151) |
| 90 | 7 (22) | 11 (35) | 17 (56) | 43 (142) |
| 95 | 6 (21) | 10 (33) | 16 (53) | 41 (135) |
| 100 | 6 (20) | 10 (32) | 15 (50) | 39 (128) |

[Note]: The requirements of diameter apply to single, solid and round cooper wire. The AWG value of multi-stranded wires depends on the total CSA (Cross Sectional Area) of all wires.

Kedacom Two (2) Year Limited Hardware Warranty

WHAT IS COVERED BY THIS WARRANTY?

Kedacom warrants the Kedacom-branded hardware product and accessories contained in the original packaging (hereinafter referred to as "Kedacom Product") against defects in materials and workmanship when used normally in accordance with Kedacom's published guidelines for a period of TWO (2) YEARS from the date of original retail purchase in areas other than mainland China by the end-user purchaser (hereinafter referred to as "Warranty Period"). For the Kedacom Product purchased in mainland China, see the simplified Chinese version of this warranty for details. Kedacom's published guidelines include but are not limited to information contained in technical specifications, user guides, and service communications. The preceding applies unless otherwise agreed in the contract.

WHAT IS NOT COVERED BY THIS WARRANTY?

This warranty does not apply to any non-Kedacom branded hardware products or any software, even if packaged or sold with Kedacom hardware. Manufacturers, suppliers, or publishers, other than Kedacom, may provide their own warranties to you but Kedacom, in so far as permitted by law, provides their products "AS IS". Software distributed by Kedacom with or without the Kedacom brand (including, but not limited to system software) is not covered by this warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Kedacom does not warrant that the operation of the Kedacom Product will be uninterrupted or error-free. Kedacom is not responsible for damage arising from failures to follow instructions relating to the Kedacom Product's use.

This warranty does not apply: (a) to consumable parts, such as batteries, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents, and broken plastic on ports; (c) to damage caused by use with another product; (d) to damage caused by acts outside the control of Kedacom, including without limitation acts of God, accidents, abuse, misuse, fire, storms, earthquakes, flood, or other external cause; (e) to damage caused by exposure of the product to heat, bright light, sun, liquids, sand, or other contaminants; (f) to damage caused by operating the Kedacom Product outside Kedacom's published guidelines; (g) to damage caused by service (including upgrades and expansions) performed by anyone other than a representative of Kedacom, Kedacom employee, or authorized Kedacom agent; (h) to an Kedacom Product that has been modified to alter functionality or capability without the written permission of Kedacom; (i) to defects caused by normal wear and tear or otherwise due to the normal aging of the Kedacom Product, or (j) if any serial number has been removed or defaced from the Kedacom Product.

YOUR RESPONSIBILITIES

If your Kedacom product is capable of storing data and other information, you should make periodic backup copies of the information contained on the storage media to protect the contents and as a precaution against possible operational failures.

Before receiving warranty service, Kedacom or its authorized agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues, and follow Kedacom's procedures for obtaining warranty service. Before submitting your Kedacom Product for warranty service, you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect, and disable all security passwords.

During warranty service, it is possible that the contents of the Kedacom product's storage media will be lost, replaced or reformatted. In such an event, Kedacom and its authorized agents are not responsible for any loss of data or other information contained on the storage media or any other part of the Kedacom product serviced.

Following warranty service, your Kedacom Product or a replacement product will be returned to you as your Kedacom Product was configured when originally purchased, subject to applicable updates. You will be responsible for reinstalling all other data and information. Recovery and reinstallation of other data and information are not covered under this warranty.

WHAT WILL KEDACOM DO IF THE WARRANTY IS BREACHED?

If during the Warranty Period, you submit a valid claim to Kedacom or an authorized Kedacom agent, Kedacom will, at its option, (i) repair the Kedacom Product using new or previously used parts that are equivalent to new in performance and reliability, or (ii) exchange the Kedacom Product for a refund of your purchase price.

A Kedacom replacement part or product, including a user-installable Kedacom part that has been installed in accordance with instructions provided by Kedacom, assumes the remaining warranty of the Kedacom Product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Kedacom's property.

Kedacom reserves the right to refund the purchase price as its exclusive warranty remedy.

HOW TO OBTAIN WARRANTY SERVICE?

To seek warranty service, please contact a local authorized Kedacom agent. When contacting the agent via telephone, other charges may apply depending on your location.

User Information

Complete the form below and keep for ready reference.

| | |
|-------------------|----------------|
| User Name: | |
| Address: | Postal Code: |
| Tel: | Mobile: |
| Fax: | E-Mail: |
| Product Name: | Product Model: |
| Date of Purchase: | |

客户咨询热线：400-828-2866

KEDACOM

苏州科达科技股份有限公司

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