

高清网络摄像机

HD IP 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 安全使用注意事项

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电源、告警、音频、RS485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。

工作环境	
工作电源	AC24V±10%
功耗	27W Max（其中补光灯最大20W）
温度	-40°C ~ +70 °C
湿度	10%~95%（无凝结）
海拔高度	-60m~3000m
大气压	86kPa~106kPa

3.日常维护与保养

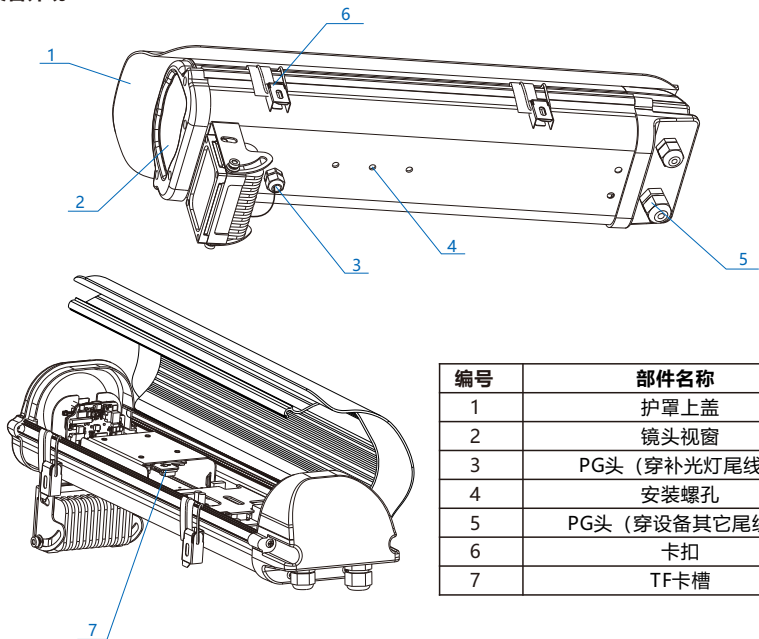
- 请勿直接接触设备发热部件，以免烫伤。
- 镜头沾染灰尘或油脂时，用棉布或镜头清洁布擦拭。若遇污垢难以清除，蘸上少量镜片清洁液，自镜头中心向外旋转轻轻擦拭，直到干净为止。禁止使用有机溶剂（苯、酒精等）对镜头和护罩前脸进行除尘、清洁。
- 请不要以任何方式拆卸或修改产品。（对未经认可的修改或维修导致的问题，本公司不承担任何责任）。
- 如果设备工作不正常，请联系经销商或最近的服务中心。

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，但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，激活时请填写有效邮箱，方便找回密码。IPCSearch请至官网下载，下载地址：<https://www.kedacom.com/cn/softtools/index.jhtml>
- 为了提高产品网络使用的安全性，建议您设置高强度密码：密码长度必须达到8-16个字符，且至少由数字和字母或特殊字符中的两种或两种以上类型组合而成。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。
- 将本产品接入互联网需自担风险，包括但不限于产品可能遭受的网络攻击、黑客攻击、病毒感染等，本公司不对因此造成的产品工作异常、信息泄露等问题承担责任，本公司将及时为您提供产品相关技术支持。
- 如需获取最新文档，请至官网下载，官网地址www.kedacom.com。

三 外观及接口

设备外观:

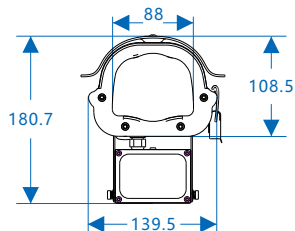
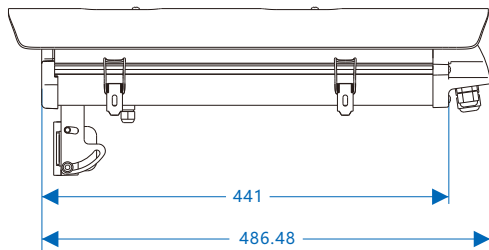
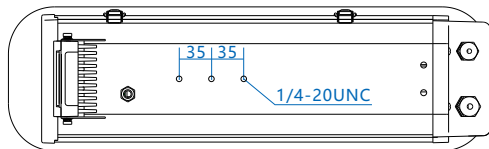
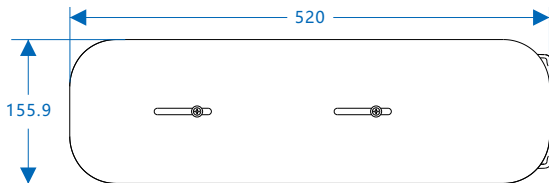


编号	部件名称
1	护罩上盖
2	镜头视窗
3	PG头 (穿补光灯尾线)
4	安装螺孔
5	PG头 (穿设备其它尾线)
6	卡扣
7	TF卡槽

【说明】安装TF卡（可选），TF卡容量最大支持256G，插入TF卡后不建议对其进行热插拔。

设备尺寸:

单位: mm



摄像机尾线连接：

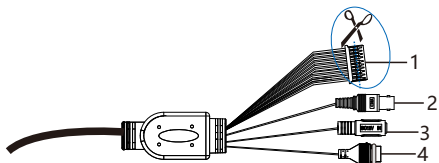


表1 线缆接口介绍

接口	接口名称	功能描述
1	用户线缆组合	包含告警输入/输出，音频输入/输出，RS485串口等
2	视频输出接口	本地视频输出复合视频信号，BNC接口
3	电源接口	连接DC12V电源
4	网络接口	连接交换机等网络接入设备（通过此接口连接网络，不是电源板上的网络接口）

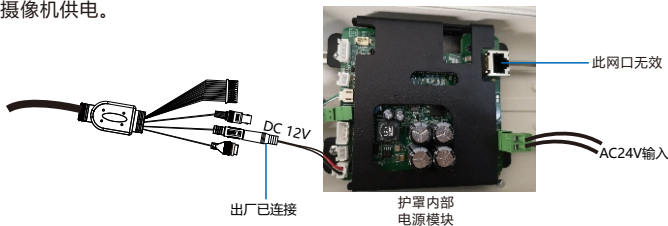
表2 用户线缆组合接口介绍

接口名称	序号	颜色	接口名称	功能描述
用户线缆组合	1	黄	RS485_A	RS485串口，与外界设备交互控制，如控制第三方设备
	2	绿	RS485_B	
	3	粉红	AUDIO_IN 1	音频输入接口，输入音频信号或进行语音对讲可连接的设备：拾音器等。
	4	白	AUDIO_IN 2	
	5	黑/白	AUDIO_OUT	音频输出接口，输出音频信号 可连接的设备：音箱等
	6	浅绿	AUDIO_GND	音频地线接口
	7	灰	ALARM_IN	告警输入接口，输入告警信号 可连接的设备：烟感器、声控开关等
	8	红	ALARM_IN_GND	告警输入地线接口
	9	蓝	ALARM_OUT 1A	告警输出接口，输出告警信号 可连接的设备：报警灯等
	10	紫	ALARM_OUT 1B	

- 【说明】1) 音频输入 (AUDIO_IN1、AUDIO_IN2) 和音频输出 (AUDIO_OUT) 共用音频地线。
2) 告警输出ALARM_OUT 1A和ALARM_OUT 1B不分正负极，组成一路告警输出。

外接AC 24V电源连接：

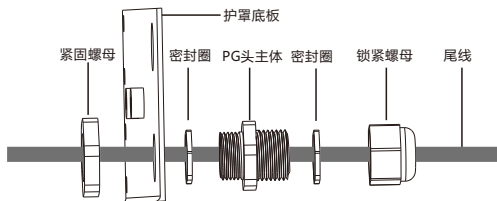
通过连接外设AC24V电源对护罩供电，护罩正常供电后，内部的电源模块会转换出一个DC12V的电源输入给摄像机供电。



布线

线缆连接完成后，将线缆从PG头穿出。

【说明】布线时，建议网线和电源线从不同的PG头穿出。



PG头拆装方法：

- 1) 打开护罩，一手握住PG头主体，一手卡住紧固螺母，逆时针旋转PG头主体将护照上的PG头拆下。
- 2) 逆时针旋转锁紧螺母将其拆下，将已经穿好金属包塑波纹的线缆依次穿入紧固螺母、PG头主体、锁紧螺母，然后顺时针拧紧锁紧螺母。

【说明】拆装过程中密封圈不要丢掉或漏装。

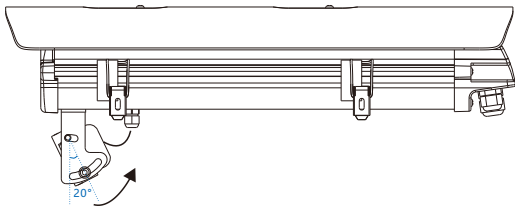
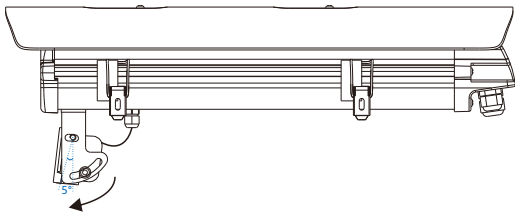
- 3) 将穿入线缆的PG头顺时针安装在护罩上，拧紧PG头，预留适当的长度线缆即可。
- 4) PG头底部和金属包塑波纹接触点，用防水胶带由上而下逆时针均匀缠绕，之后再顺时针均匀缠绕，做好防水、防尘处理。
- 5) 穿线完成后，盖好护罩上盖，以便将设备安装到支架上。

【说明】请将2个卡扣都卡紧，以防止设备进水。

补光灯调节：

根据安装场景需要，可调节补光灯垂直角度，垂直角度向上5°、向下20°可调节。调节时可参考客户端图像效果进行。

调节时沿垂直方向上下转动补光灯即可，注意不要用力过大，以免损坏补光灯。

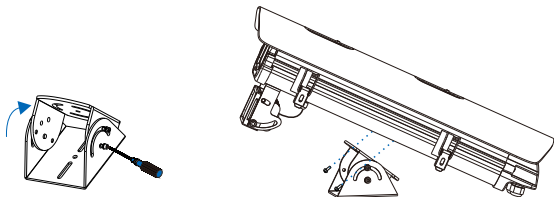


四 设备安装

本系列摄像机支持横杆装支架、吊装支架、和壁装支架安装，支架为选配件，请根据需要进行选购。
安装设备之前，请盖紧护罩上盖。

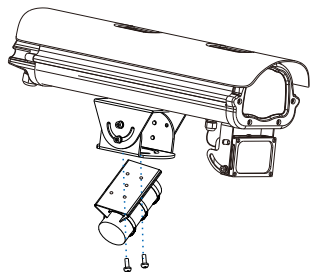
• 横杆安装方法

横杆安装需配合万向节进行安装，安装方法如下：



1. 拧松万向节螺钉，
调整万向节角度

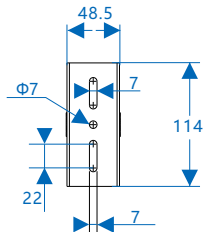
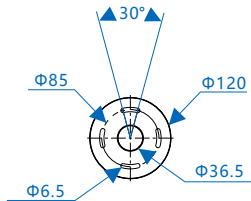
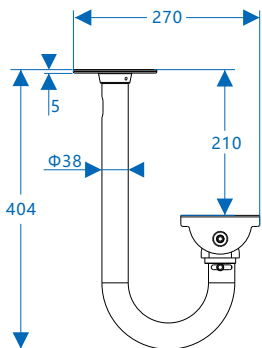
2. 将万向节固定在设备
底部的安装板上



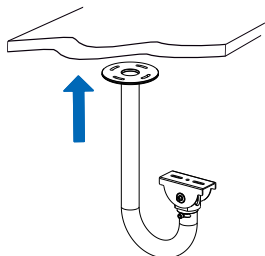
3. 将设备固定在横杆上

• 吊装安装方法

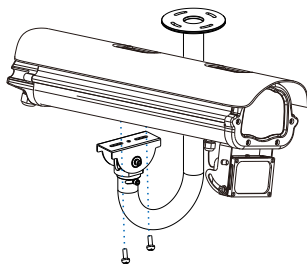
我司选配吊装支架尺寸如下：



吊装安装方法如下：



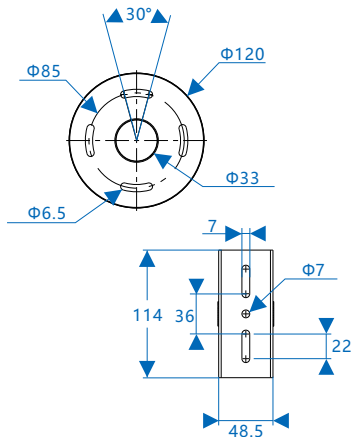
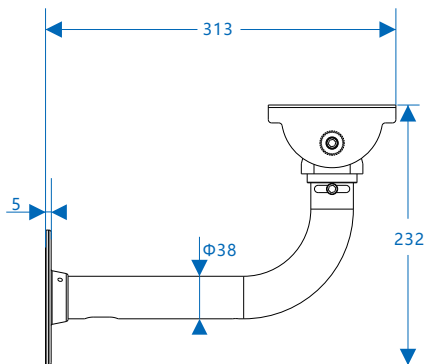
1. 将吊装支架固定在天花板上



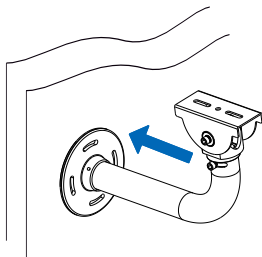
2. 将设备固定在吊装支架上

• 壁装安装方法

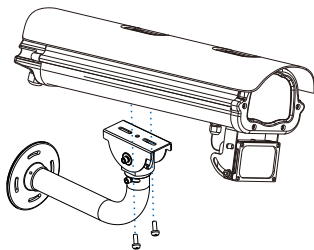
我司选配壁装支架尺寸如下：



壁装安装方法如下：



1.将壁装支架固定在墙面



2.将设备固定在壁装支架上

五 登录客户端

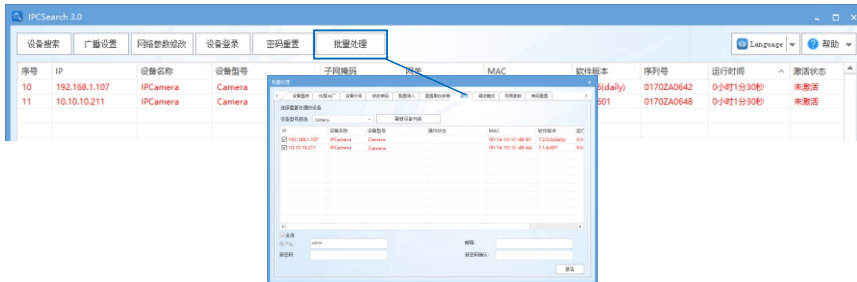
1.最低配置和系统环境

- 处理器：3.3GHz酷睿®i3系列及以上或相同性能的其他处理器
- RAM内存：4GB及以上
- 操作系统：WindowsXP操作系统或更高版本
- 浏览器：推荐使用IE内核浏览器，使用其它内核浏览器会影响客户端部分功能的使用
- DirectX：9.0c

2.设备激活

第一次使用时请运行光盘中附带的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需要用的邮箱，点击**激活**按钮激活设备。设备将自动重启。
- 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、找回密码时需要用的邮箱。点击**激活**按钮激活设备。设备将自动重启。



- Web客户端激活：也可以通过Web客户端激活。将PC机与设备设为同一网段，登录Web界面。在界面设置管理员密码和密码恢复邮箱，点击**激活**。



3. 修改设备IP

在IPCSearch中选中设备，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名（admin）及激活设备时所设置的密码。完成IP配置后，设备将自动重启。

4. 登录设备

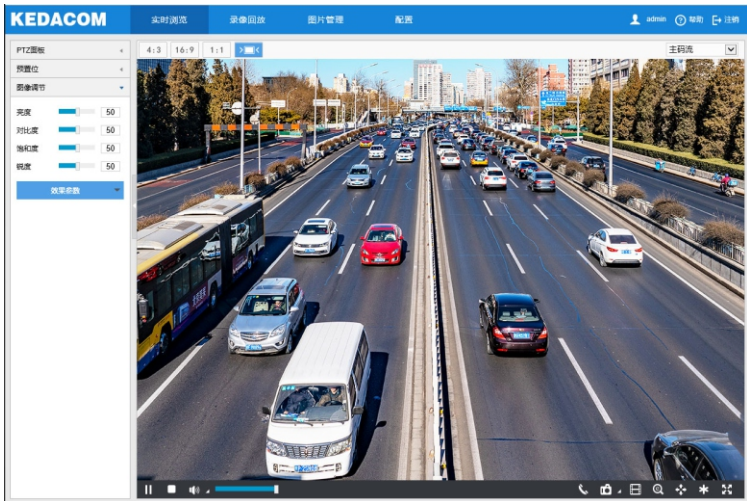
- 1) 在IPCSearch中双击设备或点击**登录设备**，输入用户名和密码，登录Web客户端。



- 2) 登录成功后，下载并安装视频插件（IE内核浏览器）。
- 3) 进入客户端后，直接浏览图像。

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

调整设备方向，在Web客户端上进行参数调整，直到浏览画面达到预定要求。



附录 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) \ 线径 mm \ 功率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)

【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 soaking.

Working Environment	
Power Supply	AC24V±10%
Power Consumption	27W Max (the max of fill light is 20 W)
Temperature	-40°C~+70°C
Humidity	10%~95% (non-condensing)
Altitude	-60m~3000m
Pressure	86kPa~106kPa

3. Daily Maintenance

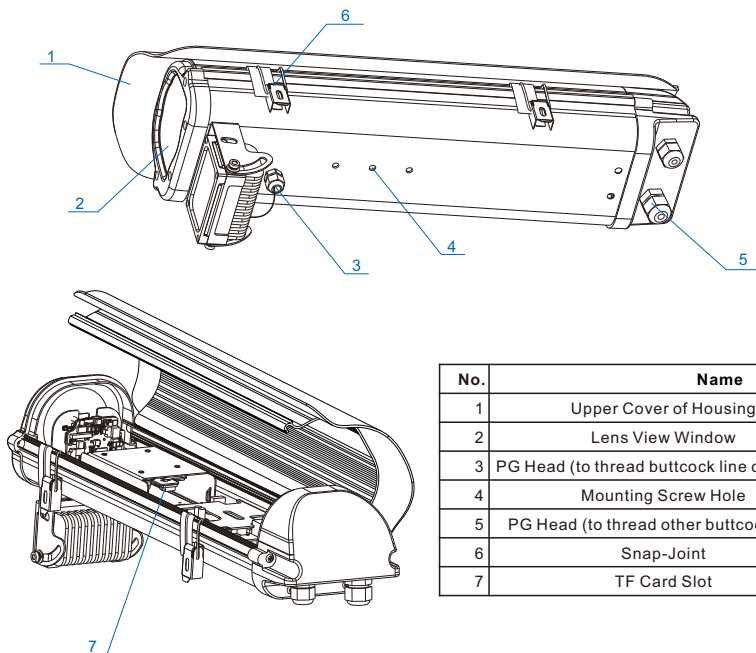
- Do not touch the heat component of the device directly to avoid empyrosis.
- When the lens is contaminated by dust or grease, use cotton cloth or lens clean cloth to wipe it off. When it is hard to clean, dip some lens cleanser and wipe gently and rotate outward from the middle until it is clean. Never 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 repair or maintenance.
- 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 it will not illustrate 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. During activation please fill a valid email address for claiming password. (download address: <https://www.kedacom.com/cn/softtools/index.jhtml>).
- 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.
- Accessing this device to the internet is at user's own risk, including but not limited to the possible network attack, hacker attack, virus infection and etc. This company will not assume any responsibility for problems of product abnormality and information disclosure caused thereof. We shall provide technical support relating to the products in time.
- For the latest files, please download from our website www.kedacom.com.

III. Appearance

Appearance:

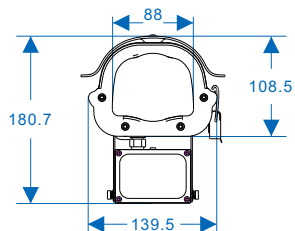
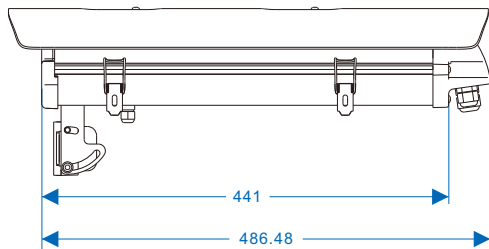
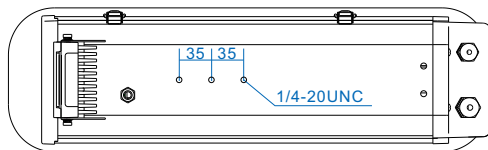
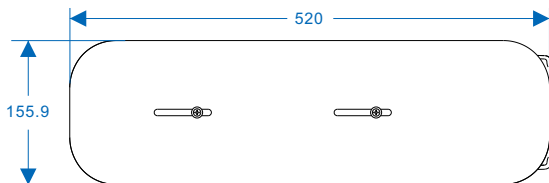


No.	Name
1	Upper Cover of Housing
2	Lens View Window
3	PG Head (to thread buttcock line of fill light)
4	Mounting Screw Hole
5	PG Head (to thread other buttcock lines)
6	Snap-Joint
7	TF Card Slot

[Note]: Install TF card (optional). The max supported memory of TF card is 256G. After the TF card is inserted, hot-swapping is not recommended.

Dimensions:

Unit: mm



Buttcock Line

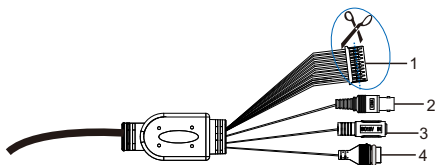


Table 1 Wiring Interface

No.	Interface Name	Function
1	User cable group	Including alarm in / out, audio in / out, RS-485 serial port and etc.
2	Video output port	Local video output composite video signal, BNC port
3	Power supply	Connect to power supply of DC12V
4	Network port	Connect to network access devices like a switch (not the network port on the power supply board)

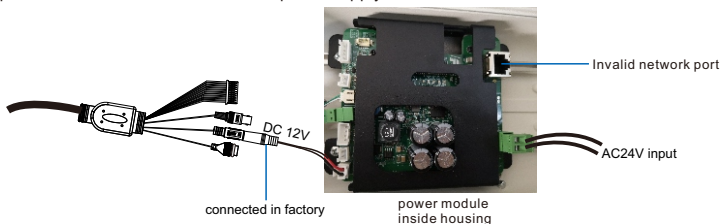
Table 2 User Cable Group Interface

Interface	No.	Color	Name	Function
User Cable Group	1	Yellow	RS485_A	RS-485 serial port to control peripheral devices such as third-party device
	2	Green	RS485_B	
	3	Pink	AUDIO_IN 1	Audio input port for inputting audio signal or intercom; connect to pick-up
	4	White	AUDIO_IN 2	
	5	Black/White	AUDIO_OUT	Audio output port for outputting audio signal connect to loudspeaker box
	6	Light Green	AUDIO_GND	Audio grounding
	7	Grey	ALARM_IN	Alarm input port for inputting alarm signal, connect to smoke detector and voice-activated switch
	8	Red	ALARM_IN_GND	Alarm input grounding
	9	Blue	ALARM_OUT 1A	Alarm output port for outputting alarm signal connect to alarm light
	10	Purple	ALARM_OUT 1B	

- [Note]: 1) The AUDIO_IN1, AUDIO_IN2 wires and the AUDIO_OUT wire share the audio grounding wire.
 2) The ALARM-OUT 1A and ALARM-OUT 1B wires are regardless of positive and negative polarities and they form a group of alarm output.

Connect to AC 24V Power Supply:

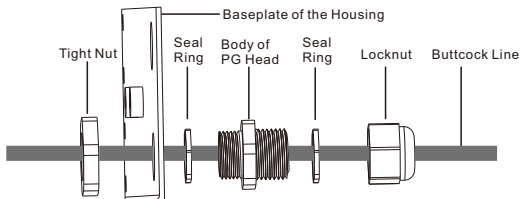
Power the housing by connecting it to external AC24V power supply. When the housing is electrified, the internal power module will transfer a DC12V power supply to the camera.



Thread Wires

After finish wire connection, thread wires out from the PG head.

[Note] Suggest threading the network cable and the power cord out from different PG heads.



Disassembling and Assembling of PG Head:

- 1) Open the housing, hold the body of PG head with one hand and steady the tight nut with another hand. Rotate the body of PG head anti-clockwise and take it down from the housing.
- 2) Rotate the locknut anti-clockwise and take it down. Thread the wires that have threaded through the metal-covered corrugated cable through the tight nut, the body of PG head and the locknut in order, and then tighten the locknut clockwise.

[Note] During disassembling and assembling, do not discard the seal ring and make sure it is in.

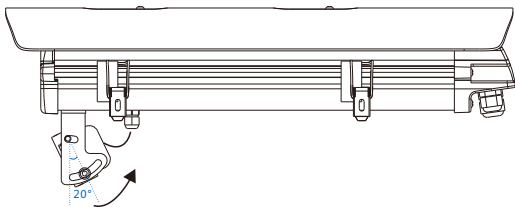
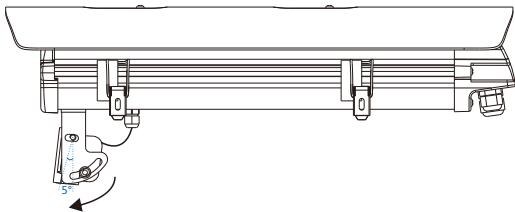
- 3) Install the PG head that has threaded through the wires onto the housing and make it tight with certain length of wires reserved.
- 4) For the connecting point at the bottom of the PG head with the metal-covered corrugated cable, bind it evenly anti-clockwise from top to bottom with waterproof adhesive tape, and then bind it evenly clockwise. Make good waterproof and dustproof treatment to it.
- 5) After finish threading wires, cover the upper cover of the housing so as to mount it onto the bracket.

[Note] Please lock the 2 snap-joints tight to prevent water in.

Adjust Fill Light:

Adjust the vertical angle of the fill light according to the installation scenes, 5° upward and 20° downward adjustable in vertical direction. Angle adjustment could be performed while viewing the image on the web client.

During adjustment, rotate the fill light in vertical direction but do not pull it forcefully, otherwise it may be damaged.



IV. Installation

The camera supports cross-bar mount, pendent bracket mount and wall bracket mount, the brackets of which are all optional. Please purchase separately if necessary.

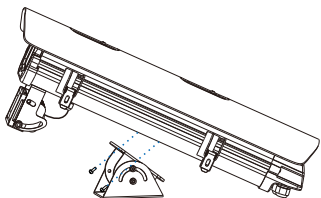
Before installing the device, please cover the upper cover of the housing tight.

Cross-Bar Mount

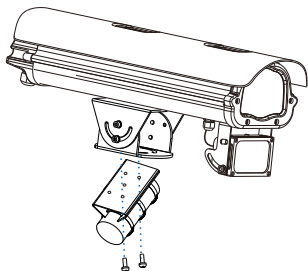
Cross-bar mount needs a cardan joint, steps as follows:



- ① Loosen the screws on the cardan joint to adjust its direction



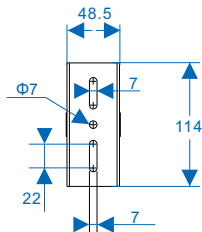
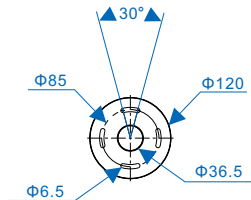
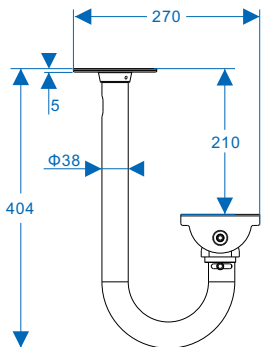
- ② Fix the cardan joint onto the baseplate at the bottom of the device



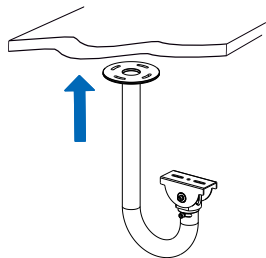
- ③ Fix the device onto the cross-bar

Pendent Bracket Mount

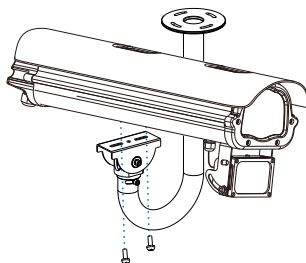
Dimensions of the optional pendent bracket of this company:



The steps of pendent bracket mount:



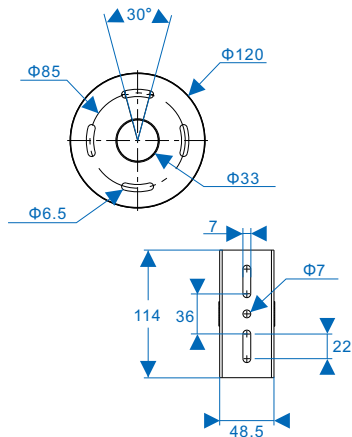
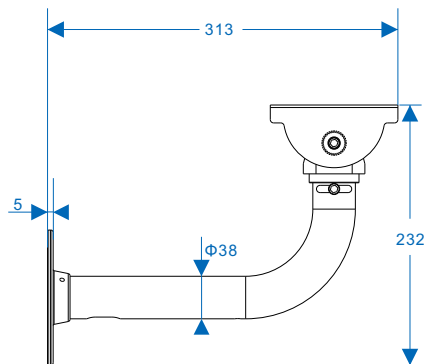
- ① Fix the pendent bracket on the ceiling



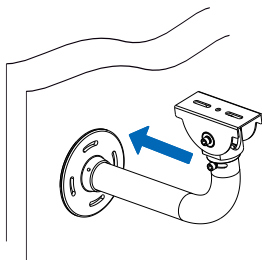
- ② Fix the device onto the pendent bracket

Wall Bracket Mount

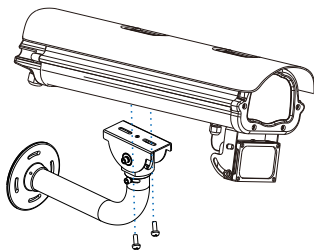
Dimensions of the optional wall bracket of this company:



The steps of wall bracket mount:



- ① Fix the wall bracket on the wall



- ② Fix the device onto the wall bracket

V. Login to the Device

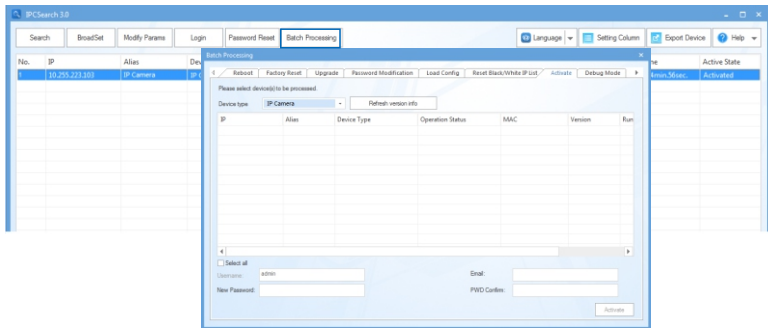
1. Minimum system configuration and environment requirements:

- Processor: 3.3 GHz CORE®i3 series or other equivalent processors
- RAM Memory: 4GB or above
- Operating System: Windows XP or higher versions
- Browser: recommend IE kernel browsers, otherwise some functions of the web client may fail
- 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

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, send it back through this email. Make 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

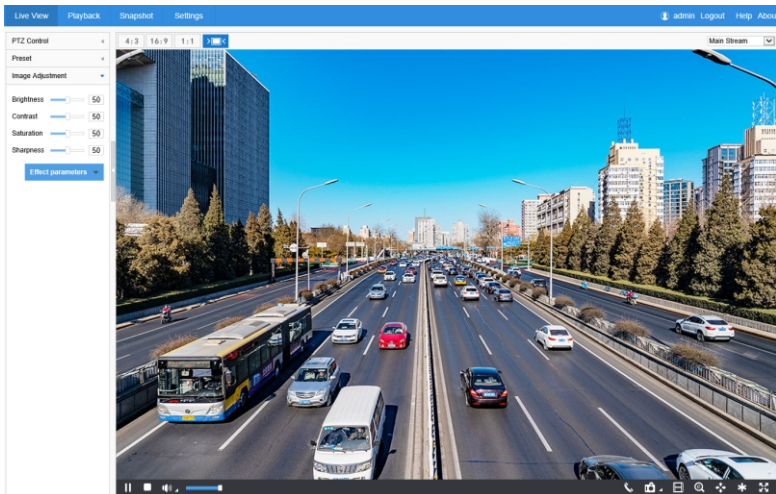


admin

Login

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

Adjust camera direction, configure camera parameters in web client until the live view meets requirement



Appendix: 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	Diameter 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)

[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

Suzhou Keda Technology Co.,Ltd.

中国: 江苏省苏州市高新区金山路131号(215011)

Tel: +86-512-6841 8188 Fax: 86-512-68412699

Suzhou Keda Technology Co.,Ltd.

Singapore: 627A Aljunied Road, #09-07, BizTech Centre, Singapore 389842

Tel: +65-6842-5700 Fax: +65-6842-5900

05.03.800927 (V1.2) 20200511