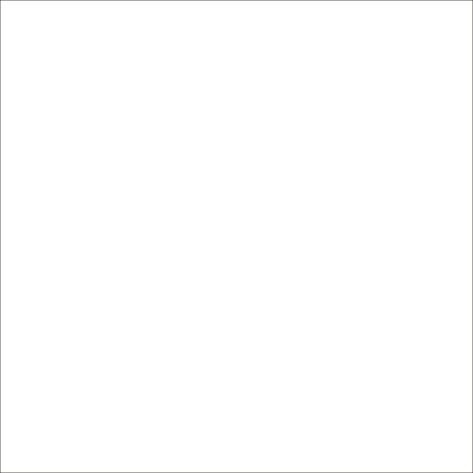
高清网络摄像机 HD IP Camera

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。
- 请在斯电状态下连接电源。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。
- 请勿阳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。
- 本产品达到IP67防护等级,工作于室外露天环境时,请注意必须对设备尾线进行防水处理。

	工作环境				
工作电源	DC12V±10%/AC24V±10%/POE(802.3at)				
功耗	15W Max				
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

- 请勿直接触碰设备发热部件,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 讲行除尘、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。

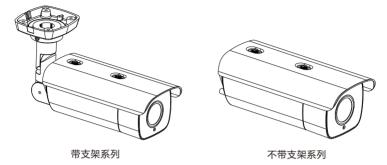
4. 特别声明

- 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

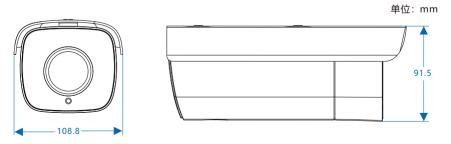
设备外观:

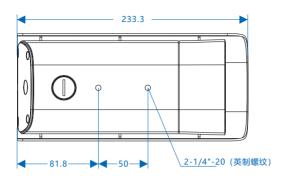
本系列设备分带支架系列和不带支架系列,外观如下图所示。



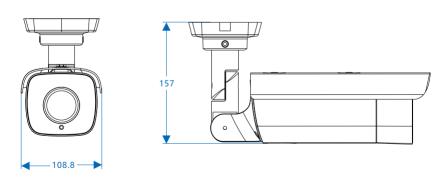
设备尺寸:

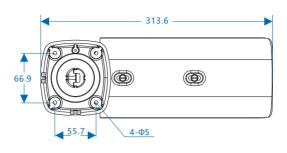
• 不带支架系列

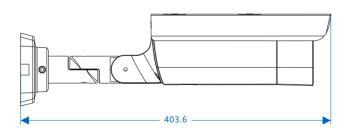




• 带支架系列

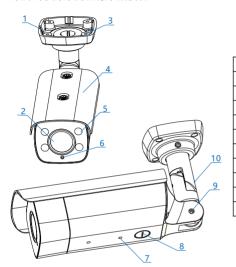






外观部件:

此处以带支架系列说明外观部件。



编号	部件名称
1	侧出线孔
2	镜头
3	底座安装螺孔
4	遮阳罩
5	红外灯
6	光敏电阻
7	支架安装螺孔
8	存储卡卡槽
9	支架固定螺钉 (垂直方向)
10	支架固定螺钉 (水平方向)

尾线:

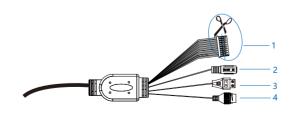


表1 线缆接口介绍

编号	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(如下表格介绍)
2	电源接口	连接DC 12V电源(设备供电请务必参考附录部分,选择合适的线径)
3	电源接口	连接AC 24V电源(设备供电请务必参考附录部分,选择合适的线径)
4	网络接口	连接交换机等网络接入设备

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
	1	橙	AUDIO GND	音频地线接口
	2	绿	AUDIO IN_1	音频输入接口,输入音频信号或进行语音对讲
	3	白	AUDIO IN_2	可连接的设备: 拾音器等
	4	棕	AUDIO GND	音频地线接口
用户线缆	5	粉红	AUDIO OUT	音频输出接口,输出音频信号 可连接的设备: 音箱等
组合	6	浅绿	AUDIO GND	音频地线接口
	7	白/黑	ALARM IN-1	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	白/红	ALARM IN GND	告警输入接地接口
	9	白/棕	ALARM OUT-1-B	告警输出接口,输出告警信号
	10	白/橙	ALARM OUT-1-A	可连接的设备: 报警灯等
	11	白/黄	RS-485-B	RS 485串口,与外界设备交互控制,如控制第三
	12	白/绿	RS-485-A	方设备

【说明】告警输出ALARM OUT -1-A和ALARM OUT-1-B不分正负极,组成一路告警输出。

四 设备安装

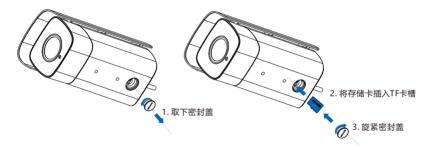
本系列摄像机,部分型号自带支架,部分型号需要用户自行准备安装支架。

安装TF卡 (可选, 部分型号支持)

此处以不带支架系列说明TF卡安装步骤,带支架系列TF卡安装方式相同。安装步骤如下图:

【说明】设备安装存储卡后支持图片告警抓拍和录像存储。

【注意】TF卡容量最大支持256G,插入TF卡后,不建议对其进行热插拨。

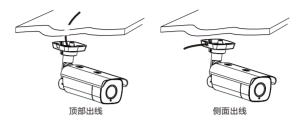


带支架型号安装方法

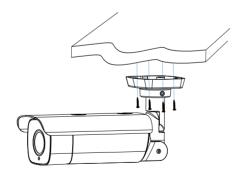
- 1)安装面打孔。取出包装箱中的安装贴纸贴在安装面上。根据贴纸所示的打孔位置在墙面打孔,将 四颗膨胀管完全塞入到安装孔中。
 - 【说明】如果在安装线缆时采用顶部出线的方式,还需要在墙面打一个线缆出孔口。如果采用从侧面出线的方式,只需通过设备底座侧出线孔,将线缆引出。



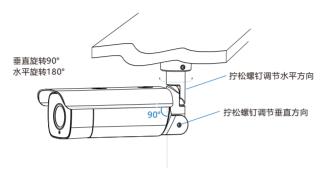
2)穿线。采用顶部出线时,将线缆穿过安装面;若采用侧面出线的方式,将线缆穿过支架底座上的侧出线孔。



3)固定设备底座至安装面。将设备底座上的4个螺丝固定孔分别对准安装面上的4个膨胀管,将四颗自攻螺钉分别穿过底座拧紧至四个膨胀管中,并锁紧,将设备固定在安装面上。



4)调整镜头监控方向。拧松支架固定螺钉,手动旋转机身调节垂直和水平监控方向。方向调节好后, 拧紧螺钉,最后撕下镜头上的保护膜。



不带支架型号安装方法

不带支架型号支持横杆安装、吊装和壁装,均需配合支架安装。支架为选配件,请根据需要自行选购。

• 横杆安装

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



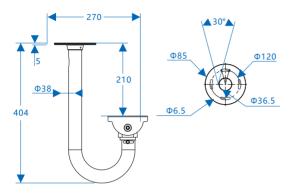
2. 将万向节固定在设备 底部的安装板上

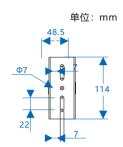


3. 将带有设备的万向 节固定在横杆上

• 吊装安装

我司选配吊装支架尺寸如下:





吊装安装方法如下:



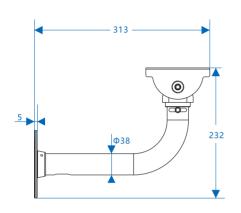
1. 将吊装支架固定在天花板上

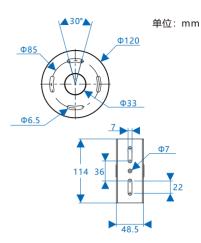


2. 将设备固定在吊装支架上

• 壁装安装

我司选配壁装支架尺寸如下:

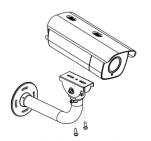




壁装安装方法如下:



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: Windows7操作系统或更高版本

浏览器(32位): 360浏览器, IE11, Firefox(51.0及以下版本), Google Chrome (41.0及以下版本)

• 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分配IP地址。

- 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、找回密码时需要用到的邮箱。点击激活按钮激活设备。设备将自动重启。
- 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。



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。

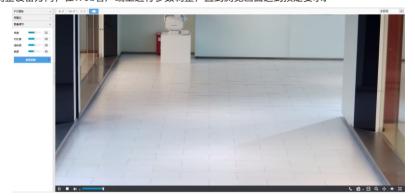
4. 登录设备

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。



4)设备安装TF卡后,需确认TF卡是否已格式化,进入**配置>存储>存储管理**界面查看TF卡状态。如果状态显示为未格式化,需要勾选TF卡,点击**格式化**按钮进行格式化,才可正常使用。格式化过程支持分区,可用于存储录像和图片。



六 快速配置

【说明】本章节主要针对产品中的智能型号,包含-Fi4N系列和-Fi8N系列。

1. 安装配置

进入**智能展示>智能配置>安装配置**界面,点击**安装示意图**,参考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(见下表),选择适宜的安装高度安装摄像机。

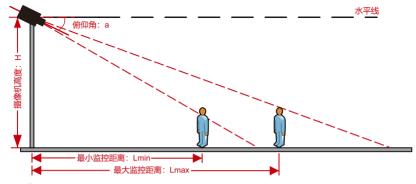
▶-Fi4N系列架设参数表:

镜头焦段	摄像机高度: H	监控距离范围: L	监控角度范围: a	最佳摄像机角度: a	最佳监控宽度	
	2m	2.7m~8.1m				
	2.5m	4m~10.3m		13°	4.5m	
8mm~32mm	3m	5.6m~12.6m	7.5°~15°			
	3.5m	8.1m~14.3m				
	4m	9.8m~17m				
	2m	2.5m~6.5m				
2.8mm~12mm	2.5m	3.5m~6.5m	7.5°~15°	13°	4.5m	
	3m	4.5m~6.5m				

▶-Fi8N系列架设参数表:

镜头焦段	摄像机高度: H	监控距离范围: L	监控角度范围:	a 最佳摄像机角度: a	最佳监控宽度
	4m	7~11m			
8mm-32mm	5m	11~15m	7 5°~15°	13°	6m
0.11111 02.111111	6m	15~19m	7.0 10	10	
	7m	18. 5~23. 5m			

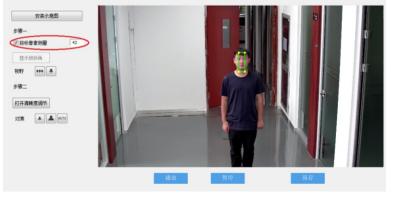
【说明】最佳监控距离,指监控画面中下部与摄像机的水平距离。 上表为摄像机按推荐俯仰角度架设,即俯仰角为13°时的架设参考数据。



2) 视野调节。

> -Fi4N系列:

勾选**目标像素测量**,可显示画面中人员的瞳孔间距。点击**拉远**或**拉近**按钮,调整视野,确保人员脸部处于画面中心位置时,瞳孔间距不小于40像素。点击**保存**,使设置生效。



> -Fi8N系列:

- a) 进入智能展示>智能配置>安装配置界面,勾选目标像素测量,可显示画面中车辆的车牌宽度。
- b) 使车辆处于画面中央。
- c) 点击**拉远**或**拉近**按钮,调节视野,改变车牌在画面中的大小,确保车牌宽度不低于规定的最小值(最小值为120像素)即可。



3)对焦。摄像机默认为自动聚焦模式,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。 点击打开清晰度调节,画面出现一个红色框,框内显示清晰度系数。该系数越大,清晰度越高。点击 聚远、聚近或自动聚焦按扭使镜头对焦,清晰度系数随之变化,清晰度系数最大时表明达到最佳对焦 位置。

2. 标定配置

摄像机安装配置完成后,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。

进入**智能展示>智能配置>标定配置**界面,可进行优选区域配置。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。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:

- 1) 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。
- 2)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。
- 3) 点击保存,设置生效。



附录A: DC 12V线径与传输距离关系表

当线径大小一定, DC 12V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DC 12V直流供电设备,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 $\rho=0.0175\Omega*mm^2/m$)

举例说明:设备功率为15W,要传输30米,根据表格查询,要选择直径1.25mm以上线径,对照附录"国内外线规对照表",1.25mm线径的横截面积是1.23mm²,选择线径时需要考虑冗余,建议使用2平方的线。

距离 m(feet) 功率W	0.800 (20AWG)	1.000 (18AWG)	1.250 (16AWG)	2.000 (12AWG)	2.300 (11AWG)	2.800	3.260 (8AWG)
5	38(125)	61(199)	96(315)	244(801)	309(1013)	456(1495)	781(2563)
10	19(63)	30(99)	48(157)	122(400)	154(507)	228(748)	391(1282)
15	13(42)	20(66)	32(105)	81(267)	103(338)	152(498)	260(854)
20	10(31)	15(50)	24(79)	61(200)	77(253)	114(374)	195(641)
25	8(25)	12(40)	19(63)	49(160)	62(203)	91(299)	156(513)
30	6(21)	10(33)	16(52)	41(133)	51(169)	76(249)	130(427)
35	5(18)	9(28)	14(45)	35(114)	44(145)	65(214)	112(366)
40	5(16)	8(25)	12(39)	31(100)	39(127)	57(187)	98(320)
45	4(14)	7(22)	11(35)	27(89)	34(113)	51(166)	87(285)
50	4(13)	6(20)	10(31)	24(80)	31(101)	46(150)	78(256)
55	3(11)	6(18)	9(29)	22(73)	28(92)	41(136)	71(233)
60	3(10)	5(17)	8(26)	20(67)	26(84)	38(125)	65(214)
65	注1	5(15)	7(24)	19(62)	24(78)	35(115)	60(197)
70	注1	4(14)	7(22)	17(57)	22(72)	33(107)	56(183)
75	注1	4(13)	6(21)	16(53)	21(68)	30(100)	52(171)
80	注1	4(12)	6(20)	15(50)	19(63)	28(93)	49(160)
85	注1	4(12)	6(19)	14(47)	18(60)	27(88)	46(151)
90	注1	3(11)	5(17)	14(44)	17(56)	25(83)	43(142)
95	注1	3(10)	5(17)	13(42)	16(53)	24(79)	41(135)
100	注1	3(10)	5(16)	12(40)	15(51)	23(75)	39(128)

- 【备注】1) 传输功率超过60W,需用1.0 (18AWG) 或以上线径;传输功率超过100W,需要用1.25 (16AWG) 或以上线径;传输功率超过150W,需要用2.0 (12AWG) 或以上线径;
 - 2) 传输功率在100~200W之间,可按照"功率翻N倍距离缩短1/N"、"线缆横截面积翻N倍,传输距离翻N倍"原则进行类比;
 - 3) 线径要求适用于单根、实心、圆形的铜线,多股绞线电缆的AWG值由所有线的总横截 面积决定。

附录B: 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 $\rho=0.0175\Omega*mm^2/m$)

举例说明:设备功率为15W,要传输40米,根据表格查询,要选择直径0.8mm及以上线径,对照附录"国内外线规对照表",0.8mm线径的横截面积是0.5mm²,选择线径时需要考虑冗余,建议使用1平方的线。

距离 m(feet) 功率W	0.800 (20AWG)	1.000 (18AWG)	1.250 (16AWG)	2.000 (12AWG)	2.300 (11AWG)	2.800
5	122(401)	194(636)	307(1008)	781(2562)	1010(3314)	1491(4891)
10	61(201)	97(318)	154(504)	391(1281)	505(1657)	745(2446)
15	41(134)	65(212)	102(336)	260(854)	337(1105)	497(1630)
20	31(100)	48(159)	77(252)	195(641)	253(829)	373(1223)
25	24(80)	39(127)	61(202)	156(512)	202(663)	298(978)
30	20(67)	32(106)	51(168)	130(427)	168(552)	248(815)
35	17(57)	28(91)	44(144)	112(366)	144(473)	213(699)
40	15(50)	24(79)	38(126)	98(320)	126(414)	186(611)
45	14(45)	22(71)	34(112)	87(285)	112(368)	166(543)
50	12(40)	19(64)	31(101)	78(256)	101(331)	149(489)
55	11(36)	18(58)	28(92)	71(233)	92(301)	136(445)
60	10(33)	16(53)	26(84)	65(214)	84(276)	124(408)
65	9(31)	15(49)	24(78)	60(197)	78(255)	115(376)
70	9(29)	14(45)	22(72)	56(183)	72(237)	106(349)
75	8(27)	13(42)	20(67)	52(171)	67(221)	99(326)
80	8(25)	12(40)	19(63)	49(160)	63(207)	93(306)
85	7(23)	11(37)	18(59)	46(151)	59(195)	88(288)
90	7(22)	11(35)	17(56)	43(142)	56(184)	83(272)
95	6(21)	10(33)	16(53)	41(135)	53(174)	78(257)
100	6(20)	10(32)	15(50)	39(128)	51(166)	75(245)

- 【备注】1) 传输功率超过240W,需要用1.0 (18AWG) 或以上线径;传输功率超过400W,需要 用1.25 (16AWG) 或以上线径;传输功率超过600W,需要用2.0 (12AWG) 或以上 线径:
 - 2) 传输功率超过100W,可按照可按照"功率翻N倍距离缩短1/N"、"线缆横截面积翻N倍,传输距离翻N倍"原则进行类比;
 - 3) 线径要求适用于单根、实心、圆形的铜线,多股绞线电缆的AWG值由所有线的总横截 面积决定。

附录C: 国内外线规对照表

公制裸线线径 (mm)	近似美制线规AWG	近似英制线规SWG	裸线横截面积mm²
0.560	24	24	0.24630
0.600	23	23	0.28270
0.710	22	22	0.39580
0.750	21	NA	0.44170
0.800	20	21	0.50270
0.900	19	20	0.63620
1.000	18	19	0.78540
1.250	16	18	1.22660
1.450	15	17	1.64600
1.630	14	16	2.08567
1.800	13	15	2.54340
2.000	12	14	3.14200
2.300	11	13	4.17000
2.590	10	12	5.26000
2.800	NA	NA	6.15440
3.000	NA	NA	7.06830
3.260	8	10	8.37000
3.670	7	9	10.55000

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)。

电话:

邮编:

- 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

-人乃原囚迫成的以苗以隋

-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

-已讨免费保修期

用户信息

用户名称:

详细地址:

传直:

邮箱:

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. Every effort has been made to ensure the accuracy and validity of this Guide. Any update of this Guide is subject to change without notice.

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 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.
- This device is IP67-rated. When it works outdoor, please make water-proof treatment to the buttcock lines.

Operating Environment				
Voltage	DC 12V±10%/AC24V±10%/PoE (802.3at)			
Power Consumption	15W Max			
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.

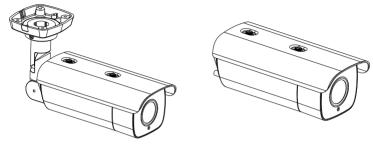
4. Special Statement

- The product appearance is subject to the actual device. Pictures in this Guide are for your 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 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. During activation please fill a valid email
 address for finding back the password. You can download IPCSearch from our website, address:
 https://www.kedacom.com/cn/softtools/index.jhtml
- For safety's concern, 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.
- You should be responsible for all risks of accessing the camera to the Internet, including but not limited to
 possible cyber-attack, hacking attack, virus infection and etc. This company is not responsible for product
 failures and information disclosure caused thereby, but will provide timely technical support for the camera.
- For the latest files, please download from our website www.kedacom.com.en.

III Appearance and Interface

Appearance:

The device has two series, one with bracket while another without bracket, appearances of which are as follows.

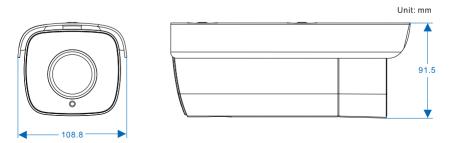


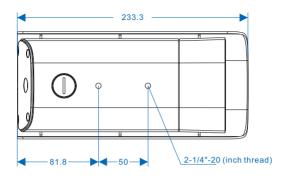
Series with Bracket

Series without Bracket

Dimensions

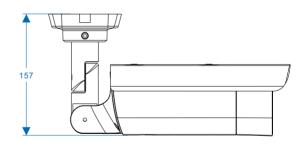
· Series without bracket

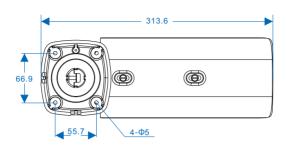


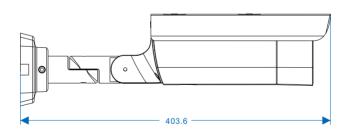


· Series with bracket



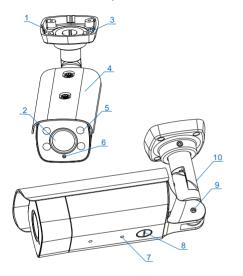






Components

Here we introduce the components of series with bracket.



No.	Component
1	Side Cable Outlet
2	Lens
3	Base Screw Hole
4	Sun Shield
5	IR Light
6	Photosensitive Resistance
7	Bracket Screw Hole
8	TF Card Slot
9	Bracket Fixing Screw (Vertical)
10	Bracket Fixing Screw (Horizontal)

Buttcock Line:

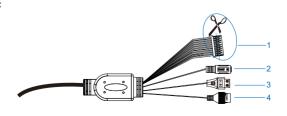


Table 1 Wiring Interface

No.	Interface Name	Function
1	User cable group	Including alarm in/out, audio in/out, RS-485 serial port and etc. (As explained below)
2	Power supply	Connect to power supply of DC12V (Refer to the Appendix to select proper wire)
3	Power supply	Connect to power supply of AC24V (Refer to the Appendix to select proper wire)
4	Network port	Connect to network access devices like a switch

Table 2 User Cable Group Interface

Interface	No.	Color	Port Name	Function
User Cable Group	1	Orange	AUDIO GND	Audio grounding
	2	Green	AUDIO IN_1	Audio input port for inputting audio signal or intercom connect to: pick-up
	3	White	AUDIO IN_2	
	4	Brown	AUDIO GND	Audio grounding
	5	Pink	AUDIO OUT	Audio output port for outputting audio signal connect to: loudspeaker box
	6	Light Green	AUDIO GND	Audio grounding
	7	White/Black	ALARM IN-1	Alarm input port for inputting alarm signal, connect to: smoke detector and voice-activated switch
	8	White/Red	ALARM IN GND	Alarm input grounding
	9	White/Brown	ALARM OUT-1-B	Alarm output port for outputting alarm signal connect to: alarm light
	10	White/Orange	ALARM OUT-1-A	
	11	White/Yellow	RS485-B	RS-485 serial port to control peripheral devices such as third-party device
	12	White/Green	RS485-A	

[Note]: Alarm output ALARM OUT-1-A and ALARM OUT-1-B are regardless of positive and negative polarities and they form a group of alarm output.

IV Installation

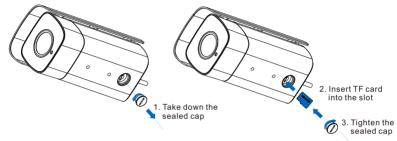
Some models of this series of cameras have a bracket with them while others require user to prepare brackets otherwise.

Install TF Card (Optional, some models support)

Here we take the models without a bracket as an example to introduce the installation steps of TF card, which are the same as that of the models with a bracket. Installation steps are as shown below:

 $\textbf{[Note]} \ A fter \ installing \ a \ TF \ card, \ the \ camera \ will \ support \ a larming \ snapshot \ and \ video \ recording \ storage.$

[Attention] The max supported memory of TF card is 256G. After insertion, hot-swapping the TF card is not recommended.



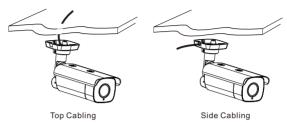
Installation of Models with Bracket

Punch holes on the mounting surface. Take out the installation sticker from the packing and paste it on the
mounting surface. Punch holes on the wall according to the positions indicated on the sticker and insert the 4
expansion screw tubes thoroughly into the holes.

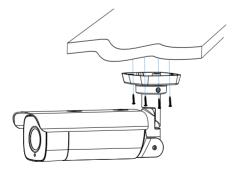
[Note] If routing the cables from the top of the mounting surface, a cable outlet hole on the wall is also needed; if routing the cables from the profile side of the device, lead the cables out through the side cable outlet on the base.



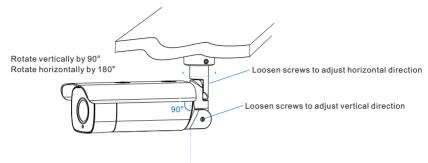
2) Thread cables. If threading cables from the top, thread cables through the mounting surface; if threading cables from the profile side of the device, thread the cables out through the side cable outlet on the base of the bracket.



3. Fix the device base onto the mounting surface. Align the 4 screw holes on the device base to the 4 expansion screw tubes on the mounting surface, thread the 4 tapping screws through the base and tighten them into the expansion screw tubes to fix the camera onto the mounting surface.



4. Adjust lens surveillance direction. Loosen the fixing screws on the bracket, rotate the camera manually in horizontal and vertical directions. After finishing direction adjustment, tighten the screws and peel off the protective film on the lens.



Installation of Models without Bracket

Models without bracket support cross-bar mount, pendent bracket mount and wall bracket mount, all brackets optional. Please purchase separately if necessary.

Cross-Bar Mount

Cross-bar mount needs a cardan joint, the steps of which are as follows:



 Loosen the screws on the cardan joint to adjust its direction



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

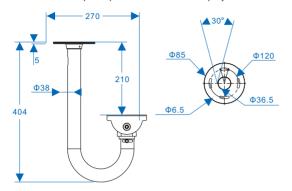


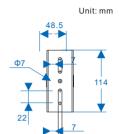
3. Fix the cardan joint with device onto the cross-bar

-

Pendent Bracket Mount

Dimensions of the optional pendent bracket of this company:





The steps of pendent bracket mount:

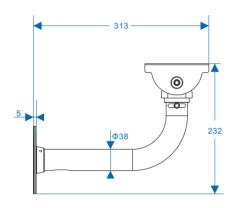


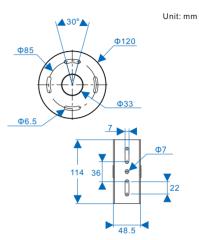
Fix the pendent bracket on the ceiling



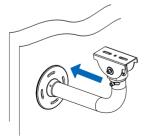
2. Fix the device onto the pendent bracket

Wall Bracket Mount Dimensions of the optional wall bracket of this company:

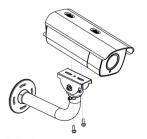




The steps of wall bracket mount:



1. Fix the wall bracket on the wall



2. Fix the device onto the wall bracket

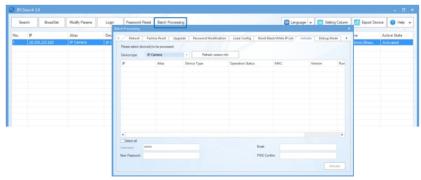
V Login to Web Client

- 1. Minimum System Configurations and Requirements
 - Processor: 3.3 GHz CORE®i3 series or other equivalent processors
 - RAM Memory: 4GB or above
 - Operating System: Windows 7 or newer version
 - Browser (32 bits): 360 browser, IE11 or newer, Firefox (51.0 and lower versions), Google Chrome (41.0 and lower versions)
 - DirectX: 9.0c

2. Device Activation

When using the device for the first time, IPCS earch will display the 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 "Activate". 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".









3. Modify Device IP Address

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

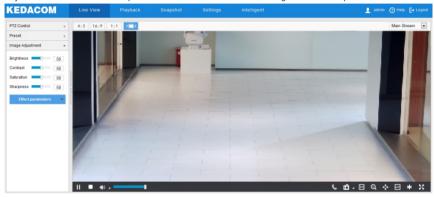
4. Login to the Device

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 (IE Kernal browser).
- 3) Re-login to the web client and view live video directly.
 - [Note]: Interfaces of different models may differ. Please subject to the actual product. Please refer to the Help file for detailed explanation.

Adjust device direction and edit parameters on the web client till the image meets the requirements.



4) After installing the TF card, you need to confirm if the TF card has been formatted. Go to **Settings > Storage > Storage Management** to view TF card status. If it is unformatted, select the TF card and click "**Formatting**" to format it and it will work normally. The formatting supports partitioning to store videos and pictures.



VI Quick Settings

[Note] This part introduces the intelligent configuration of the intelligent models, including the "-Fi4N" series and the "-Fi8N" series.

1. Installation Configuration

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

1) Installation examination. Select proper installation height for the camera according to actual installation environment and the following tables of Reference of Installation Parameters.

-Fi4N series: Reference of Installation Parameters

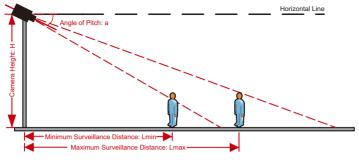
Lens Focal Length	Camera Height: H	Surveillance Distance: L	Camera Angle of Pitch: a	Optimum Angle of Pitch: a	Optimum Surveillance Width	
	2m	2.7m~8.1m		13°		
	2.5m	4m~10.3m			4.5m	
8mm- 32mm	3m	5.6m~12.6m	7.5°~15°			
	3.5m	8.1m~14.3m				
	4m	9.8m~17m				
	2m	2.5m~6.5m				
2.8mm- 12mm	2.5m	3.5m~6.5m	7.5°~15°	13°	4.5m	
	3m	4.5m~6.5m				

-Fi8N series: Reference of Installation Parameters

Lens Focal Length	Camera Height: H	Surveillance Distance: L	Camera Angle of Pitch: a	Optimum Angle of Pitch: a	Optimum Surveillance Width	
	4m 7m~11m					
8mm- 32mm	5m	11m~15m	7.5°~15°	13°	6m	
	6m	15m~19m	7.5 ~15			
	7m	18.5m~23.5m				

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

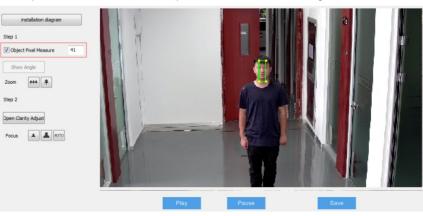
The above tables are references of installation parameters when the camera angle of pitch is the suggested one, i.e. 13°.



2) Adjust camera field of view.

· -Fi4N series:

Select "Object Pixel Measure" to show the interpupillary distance (IPD) of the person in the picture. Click icons of "Zoom in" or "Zoom out" to adjust the field of view and make sure the person's face is in the center of the picture and the IPD is no less than 40 pixels. Click "Save" to validate settings.



-Fi8N series:

- a) Go to Intelligent > Settings > Install, select "Object Pixel Measure" to show the width of the vehicle plate in the image.
- b) Make the vehicle in the center of the image.
- c) Click icons of "Zoom in" or "Zoom out" to adjust the field of view and change the size of vehicle plate to ensure the plate width is no less than the specified minimum value (120 pixels).



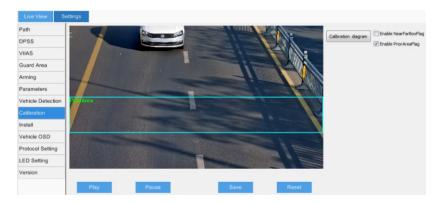
3) Focusing. The default focus mode of the camera is auto. Only when auto focusing cannot obtain clear images should user focus manually. Click "Open Clarity Adjust" and a red frame will display in the picture, showing the clarity coefficient. The larger the coefficient is, the higher the clarity will be. Click icons of "Focus far", "Focus near" and "Auto focus" to make the lens focus and the clarity coefficient will change accordingly. When the coefficient comes to the max, it means the camera has reached the best focus position.

2. Calibration

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

Go to Intelligent > Settings > Calibration and configure the 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. 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:

- 1) 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.
- 2) 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.
- 3) Click "Save" to validate settings.



Appendix A: DC12V Wire Diameter VS. Transmission Distance

The recommended max transmission distance when the wire diameter is certain and the DC12V voltage loss rate is less than 10% (For DC12V powered devices, the maximum allowed voltage loss rate is 10%. All the wires in the following table are cooper wires, whose electrical resistivity is $\rho = 0.0175\Omega^*mm^2/m$)

For example: The power consumption of the device is 15 W and the transmission distance is 30 m. According to the following table, you should choose wires with diameter of 1.25 mm or above, and by referring to **Appendix** C: **Wire Gauges at Home and Abroad**, the CSA of 1.25 mm wire is 1.23 mm². Take redundancy into consideration, suggest using wires of 2 mm².

Diameter							
Distance (mm) m (feet) Power (W)	0.800 (20AWG)	1.000 (18AWG)	1.250 (16AWG)	2.000 (12AWG)	2.300 (11AWG)	2.800	3.260 (8AWG)
5	38(125)	61(199)	96(315)	244(801)	309(1013)	456(1495)	781(2563)
10	19(63)	30(99)	48(157)	122(400)	154(507)	228(748)	391(1282)
15	13(42)	20(66)	32(105)	81(267)	103(338)	152(498)	260(854)
20	10(31)	15(50)	24(79)	61(200)	77(253)	114(374)	195(641)
25	8(25)	12(40)	19(63)	49(160)	62(203)	91(299)	156(513)
30	6(21)	10(33)	16(52)	41(133)	51(169)	76(249)	130(427)
35	5(18)	9(28)	14(45)	35(114)	44(145)	65(214)	112(366)
40	5(16)	8(25)	12(39)	31(100)	39(127)	57(187)	98(320)
45	4(14)	7(22)	11(35)	27(89)	34(113)	51(166)	87(285)
50	4(13)	6(20)	10(31)	24(80)	31(101)	46(150)	78(256)
55	3(11)	6(18)	9(29)	22(73)	28(92)	41(136)	71(233)
60	3(10)	5(17)	8(26)	20(67)	26(84)	38(125)	65(214)
65	Note 1	5(15)	7(24)	19(62)	24(78)	35(115)	60(197)
70	Note 1	4(14)	7(22)	17(57)	22(72)	33(107)	56(183)
75	Note 1	4(13)	6(21)	16(53)	21(68)	30(100)	52(171)
80	Note 1	4(12)	6(20)	15(50)	19(63)	28(93)	49(160)
85	Note 1	4(12)	6(19)	14(47)	18(60)	27(88)	46(151)
90	Note 1	3(11)	5(17)	14(44)	17(56)	25(83)	43(142)
95	Note 1	3(10)	5(17)	13(42)	16(53)	24(79)	41(135)
100	Note 1	3(10)	5(16)	12(40)	15(51)	23(75)	39(128)

- [Note] 1) When the transmission power is over 60 W, apply wires with diameter of 1.0 (18 AWG) or above; over 100 W, apply wires with diameter of 1.25 (16 AWG) or above; over 150 W, apply wires with diameter of 2.0 (12 AWG) or above.
 - 2) When the transmission power is between 100 W and 200 W, follow the principles of "Power increases by N times and distance reduces by 1/N times" and "Wire CSA increases by N times and transmission distance increases by N times".
 - 3) The requirements of wire 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.

Appendix B: AC24V 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 $\rho = 0.0175\Omega^* mm^2/m$)

For example: The power consumption of the device is 15 W and the transmission distance is 40 m. According to the following table, you should choose wires with diameter of 0.8 mm or above, and by referring to **Appendix C: Wire Gauges at Home and Abroad**, the CSA of 0.8 mm wire is 0.5 mm². Take redundancy into consideration, suggest using wires of 1 mm².

Diameter						
Distance (mm) m (feet)	0.800	1.000	1.250	2.000	2.300	2.800
	(20AWG)	(18AWG)	(16AWG)	(12AWG)	(11AWG)	2.800
Power (W)						
5	122(401)	194(636)	307(1008)	781(2562)	1010(3314)	1491(4891)
10	61(201)	97(318)	154(504)	391(1281)	505(1657)	745(2446)
15	41(134)	65(212)	102(336)	260(854)	337(1105)	497(1630)
20	31(100)	48(159)	77(252)	195(641)	253(829)	373(1223)
25	24(80)	39(127)	61(202)	156(512)	202(663)	298(978)
30	20(67)	32(106)	51(168)	130(427)	168(552)	248(815)
35	17(57)	28(91)	44(144)	112(366)	144(473)	213(699)
40	15(50)	24(79)	38(126)	98(320)	126(414)	186(611)
45	14(45)	22(71)	34(112)	87(285)	112(368)	166(543)
50	12(40)	19(64)	31(101)	78(256)	101(331)	149(489)
55	11(36)	18(58)	28(92)	71(233)	92(301)	136(445)
60	10(33)	16(53)	26(84)	65(214)	84(276)	124(408)
65	9(31)	15(49)	24(78)	60(197)	78(255)	115(376)
70	9(29)	14(45)	22(72)	56(183)	72(237)	106(349)
75	8(27)	13(42)	20(67)	52(171)	67(221)	99(326)
80	8(25)	12(40)	19(63)	49(160)	63(207)	93(306)
85	7(23)	11(37)	18(59)	46(151)	59(195)	88(288)
90	7(22)	11(35)	17(56)	43(142)	56(184)	83(272)
95	6(21)	10(33)	16(53)	41(135)	53(174)	78(257)
100	6(20)	10(32)	15(50)	39(128)	51(166)	75(245)

- [Note] 1) When the transmission power is over 240 W, apply wires with diameter of 1.0 (18 AWG) or above; over 400 W, apply wires with diameter of 1.25 (16 AWG) or above; over 600 W, apply wires with diameter of 2.0 (12 AWG) or above.
 - 2) When the transmission power is over 100 W, follow the principles of "Power increases by N times and distance reduces by 1/N times" and "Wire CSA increases by N times and transmission distance increases by N times".
 - 3) The requirements of wire 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.

Appendix C: Wire Gauges at Home and Abroad

Metric Bare Wire Diameter (mm)	Approximate US Wire Gauge AWG	Approximate UK Wire Gauge SWG	Bare Wire CSA (mm²)
0.560	24	24	0.24630
0.600	23	23	0.28270
0.710	22	22	0.39580
0.750	21	NA	0.44170
0.800	20	21	0.50270
0.900	19	20	0.63620
1.000	18	19	0.78540
1.250	16	18	1.22660
1.450	15	17	1.64600
1.630	14	16	2.08567
1.800	13	15	2.54340
2.000	12	14	3.14200
2.300	11	13	4.17000
2.590	10	12	5.26000
2.800	NA	NA	6.15440
3.000	NA	NA	7.06830
3.260	8	10	8.37000
3.670	7	9	10.55000

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

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