高清智能网络摄像机 HD Intelligent 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。
- 请勿阳挡设备附近的诵风口,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、储存及安装过程中重压、剧烈震动、浸泡设备。

工作环境		
工作电源	DC48V±10%	
功耗	60W 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

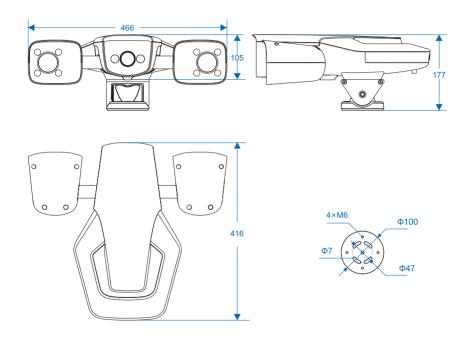
- 请勿直接触碰设备发热部件,以免烫伤。
- 镜头沾染灰尘或油脂时,用棉布或镜头擦拭布擦拭。若遇污垢难以清除,蘸上少量镜片清洁液,自 镜头中心向外旋转轻轻擦拭,直到干净为止。禁止使用有机溶剂(苯、酒精等)对镜头和护罩前脸 进行除尘、清洁。
- 请不要以任何方式拆卸或修改产品。(对未经认可的修改或维修导致的问题,本公司不承担任何责任)。
- 如果设备工作不正常,请联系经销商或最近的服务中心。

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。

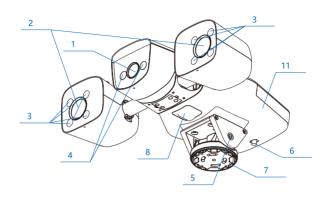
三 外观及接口

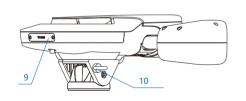
外观尺寸



单位: mm 净重: 9.6kg

外观部件





序号	部件名称
1	全景镜头
2	特写镜头
3	8×红外补光灯
4	2×暖光补光灯
5	俯仰角调节螺钉
6	尾线
7	水平法兰
8	WIFI天线
9	TF/SIM卡插槽
10	吊环
11	主仓

尾线

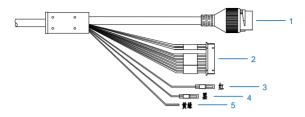


表1 线缆接口介绍

	- X-202CE71-E			
接口	接口名称	功能描述		
1	网络接口	连接交换机等网络接入设备		
2	用户线缆组合	包含告警输入/输出,音频输入/输出,RS485串口等		
3	电源接口 (红)	连接DC48V电源正极		
4	电源接口 (黑)	连接DC48V电源负极		
5	PGND	保护接地		

表2 用户线缆组合接口介绍

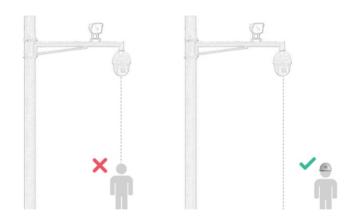
接口名称	序号	颜色	接口名称	功能描述
	1	蓝	AUDIO OUT	音频输出接口,输出音频信号
	2	紫	AUDIO GND	音频地线接口
	3	灰	AUDIO IN	音频输入接口,输入音频信号或进行语音对讲
m -> 44	4	白	ALARM GND	告警地线接口
用户线 缆组合	5	粉	ALARMIN	告警输入接口,输入告警信号
3/0300	6	浅绿	ALARM OUT A	
	7	白红	ALARM OUT B	古書制山技口,制山古書后专
	9	绿	RS-485-A	RS485串口,与外界设备交互控制,如控制第
	11	黄	RS-485-B	三方设备

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

四 设备安装

1. 安装注意事项

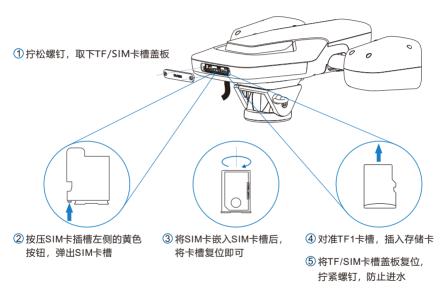
- 确认安装地点有容纳本产品及其安装结构件的足够空间。
- 请确保安装摄像机的墙面、横杆等的承受能力必须能支撑摄像机及其安装结构件重量的 8 倍。
- 没有限高通行的路段,建议摄像机安装高度不低于5米,减少摄像机被碰擦的风险。
- 施工期间禁止人员在摄像机下方 2 米内活动,并请配戴好安全帽等防护装备。



2. 安装存储卡和SIM卡 (可选, 部分型号支持)

设备安装TF卡后支持图片告警抓拍和录像存储。TF卡及SIM卡安装步骤如图。

- 【说明】1) TF卡容量最大支持256G,插入TF卡后,不建议对其进行热插拨。
 - 2) TF1为存储卡插槽, TF2为加密卡插槽。



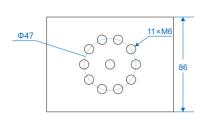
3. 安装方式

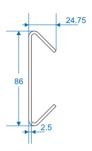
摄像机支持横杆安装和壁装。抱柱支架、壁装支架为选配件,请根据需要进行选购。

【注意】安装过程中,请勿取下摄像机主仓两侧的固定泡棉,以免夹伤。安装完成后,请取下固定泡棉,以防止设备上电后无法正确自检。

横杆安装

我司选配抱柱支架尺寸如下:



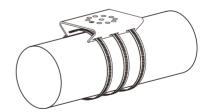


单位: mm

横杆安装方法如下:

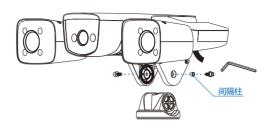
1) 安装抱柱支架。旋开抱柱支架抱箍卡扣:将抱柱支架固定到安装横杆上,拧紧抱箍卡扣固定支架。





2) 卸下设备两侧的俯仰角调节螺钉,取出间隔柱,取下水平法兰。

【注意】间隔柱体积较小, 取出后请妥善保存, 谨防遗失。



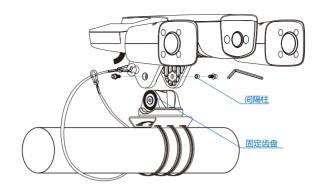
3)如下图所示,将水平法兰放置在抱柱支架上,调整水平法兰的方向,使方向指示箭头正对需要监控的区域。调整完成后,使用5颗M6×16螺钉固定。



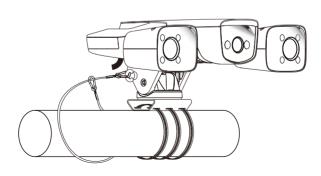
4) 取出安全绳,将一端预先挂扣在摄像机吊环上,使安全绳绕过横杆,再将另一端挂扣在安全绳或摄像机吊环上:

如下图所示,将摄像机安装到水平法兰上,拧上固定齿盘一侧的俯仰角度调节螺钉。将设备调整至 合适的俯仰角度,确保固定齿盘紧密咬合,再将间隔柱复位,旋紧两侧的俯仰角度调节螺钉,固定 设备。

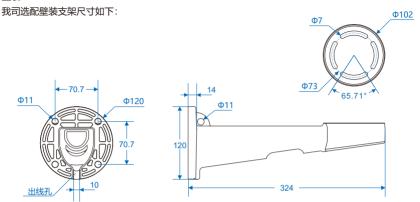
【注意】安装时切勿漏装间隔柱。缺少间隔柱将导致设备无法正常固定,甚至引发事故。



- 5) 按照摄像机尾线所贴标签连接线缆,线缆连接参见尾线说明。连接完成后检查并整理各类线缆,线 缆接口处用绝缘胶布缠绕牢固,整理好并用束带捆绑。
- 6) 安装完成后, 撕掉镜头塑料保护膜, 取下摄像机主仓两侧的固定泡棉, 设备上电。



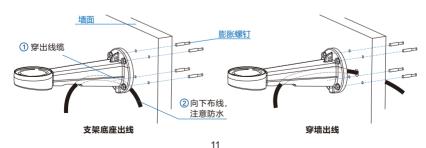
壁装



单位: mm

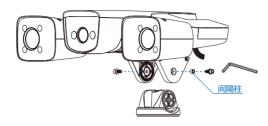
壁装安装方法如下:

- 1) 将线缆从支架穿出,线缆请留出足够长度,以便连接摄像机尾线;
- 2) 在墙面打好孔, 孔深不小于55mm; 塞入4颗M8×80膨胀螺钉, 将支架底座的孔对准墙面上的孔, 拧 紧螺母;

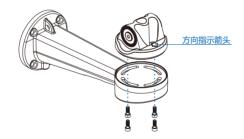


3) 卸下设备两侧的俯仰角调节螺钉,取出间隔柱,取下水平法兰。

【注意】间隔柱体积较小,取出后请妥善保存,谨防遗失。



4) 如下图所示,将水平法兰放置在壁装支架上,调整水平法兰的方向,使方向指示箭头正对需要监控的区域。调整完成后,使用4颗M6×16螺钉固定。

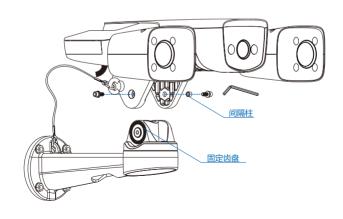


5) 取出安全绳,将一端预先挂扣在壁装支架的挂耳上。

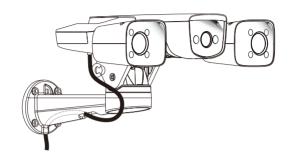


- 6) 将安全绳的另一端挂扣到摄像机吊环上。
- 7)如下图所示,将摄像机安装到水平法兰上,拧上固定齿盘一侧的俯仰角度调节螺钉。将设备调整至 合适的俯仰角度,确保固定齿盘紧密咬合,再将间隔柱复位,旋紧两侧的俯仰角度调节螺钉,固定 设备。

【注意】安装时切勿漏装间隔柱。缺少间隔柱将导致设备无法正常固定, 甚至引发事故。



8) 按照摄像机尾线所贴标签连接线缆,线缆连接参见尾线说明。连接完成后检查并整理各类线缆,线 缆接口处用绝缘胶布缠绕牢固,整理好并用束带捆绑,收纳至壁装支架内。



9) 安装完成后, 撕掉镜头塑料保护膜, 取下摄像机主仓两侧的固定泡棉, 设备上电。

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(32位):360浏览器,IE7.0及以上版本,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。

- 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、找回密码时需要用到的邮箱。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。可在界面设置管理员密码和密码恢复邮箱,点击激活。



登录



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。

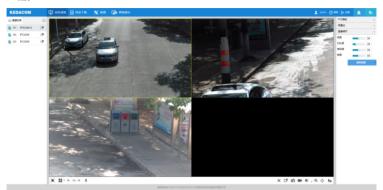
4. 登录设备

1) 在浏览器地址栏中,输入http://ip:8080,进入Web客户端登录界面。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,选中空闲窗口;在左侧通道列表中,双击需浏览的通道,即可在选定的窗口中浏览 该通道的图像。
 - 【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。



4) 设备安装TF卡后,需确认TF卡是否已格式化。重启摄像机,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

1. 架设要求

安装时,应确保摄像机的架设符合下述要求:

- 摄像机安装高度应为3m~6m。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5m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 12°~18°, 推荐俯仰角度为15°。

2. 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(详见附录A),选择适宜的安装高度安装摄像机。 【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。
- 2)点选待配置的设备,可选择全景、特写左或特写右,分别对全景镜头、左侧特写镜头和右侧特写镜 头进行配置,全景、特写镜头均可独立配置参数。

【说明】IPC2258-GiCN-SML50D全景为定焦镜头,不支持视野调节和对焦功能。



- 3) 视野调节。采用标定框调节,调节完成后,点击保存,使设置生效。
 - 【说明】在对特写镜头进行视野调节前,需操作PTZ控制按键调整特写镜头的方向,使视野中心正对重点抓拍区域。
 - a) 进入**智能展示>智能配置>安装配置**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:
 - b) 将50cm×50cm的标定纸板(或车牌)置于画面中央,正对镜头;
 - c) 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。



- 4) 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。
 - a) 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;
 - b) 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。
- 5) 点击保存, 使参数设置生效。参照以上方法, 依次配置全景、特写左和特写右。

- 【注意】1) 清晰度显示功能仅在编码格式为H.264或H.265时有效。
 - 2) 配置过程中,建议用一个纹理丰富的物品做标定纸板,如报纸等。
 - 3) 安装配置完成后,点击保存,设置才能生效,同时锁定摄像机的焦距。若在其他界面调节 焦距,5分钟之后摄像机自动恢复到锁定状态。
 - 4) 镜头参数调试完成后,为避免误操作,可对镜头进行锁定,进入**配置>摄像机配置>PTZ锁定**界面,选择需要锁定的镜头通道,勾选镜头锁定、云台锁定。镜头锁定状态下,不可调节镜头参数(包括视野、聚焦等);云台锁定(针对特写镜头)状态下,不可进行PTZ控制。如需重新调试,取消勾选即可。

3. 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。摄像机主要用于抓拍车辆时,需参照车牌进行标定。

- 进入智能展示>智能配置>标定配置界面,点选待配置的设备,可选择全景、特写左或特写右,分别对全景镜头、左侧特写镜头和右侧特写镜头进行标定配置。
- 2) 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。



- 3) 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。
 - 【注意】1)标定过程中,不可进行视野调节,即不可使用拉近、拉远按钮。
 - 2) 安装配置完成后,点击**保存**,设置才能生效,同时锁定摄像机的焦距。若在其他界面调节 焦距,5分钟之后摄像机自动恢复到锁定状态。
- 4) 点击保存,参数设置即可生效。

附录A: 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15°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。

IPC2258-GiCN-SML50D					
加い古舟	架设高度 俯仰角	全景		特写	
采以 同及		监控宽度	抓拍距离	监控宽度	抓拍距离
3m	15°	10m	6~10m	4m	随动调节
4m	15°	10m	8~10m	4m	随动调节

	IPC2258-GiCN-SML50				
架设高度	俯仰角	全景		特写	
朱以同及		监控宽度	抓拍距离	监控宽度	抓拍距离
3m	15°	7m	6~10m	4m	随动调节
4m	15°	8m	8~12m	4m	随动调节
5m	15°	9m	10~12m	4m	随动调节
6m	15°	9m	13~15m	4m	随动调节

附录B: DC48V线径与传输距离关系表

当线径大小一定, DC48V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 DC48V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 $\rho=0.0175\Omega*mm^2/m)$

距离 m(feet) 功率W	0.8 (20AWG)	1.0(18AWG)	1.25(16AWG)	2.0(12AWG)
5	612 (2006)	969 (3179)	1536 (5039)	3905 (12812)
10	306 (1003)	484 (1590)	768 (2520)	1953 (6406)
15	204 (669)	323 (1060)	512 (1680)	1302 (4271)
20	153 (502)	242 (795)	384 (1260)	976 (3203)
25	122 (401)	194 (636)	307 (1008)	781 (2562)
30	102 (334)	162 (530)	256 (840)	651 (2135)
35	87 (287)	138 (454)	219 (720)	558 (1830)
40	76 (251)	121 (397)	192 (630)	488 (1601)
45	68 (223)	108 (353)	171 (560)	434 (1424)
50	61 (201)	97 (318)	154 (504)	391 (1281)
55	56 (182)	88 (289)	140 (458)	355 (1165)
60	51 (168)	81 (265)	128 (420)	325 (1068)
65	47 (154)	75 (245)	118 (388)	300 (986)
70	44 (143)	69 (227)	110 (360)	279 (915)
75	41 (134)	65 (212)	102 (336)	260 (854)
80	38 (125)	61 (199)	96 (315)	244 (801)
85	36 (118)	57 (187)	90 (296)	230 (754)
90	34 (111)	54 (177)	85 (280)	217 (712)
95	32 (106)	51 (167)	81 (265)	206 (674)
100	31 (100)	48 (159)	77 (252)	195 (641)

【说明】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

本保修卡适用干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

购买日期:

用尸名称:	
详细地址:	
传真:	电话:
邮箱:	邮编:
产品名称:	
产品型号:	

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 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.

Operating Environment		
Voltage	DC 48V±10%	
Power Consumption	60W Max	
Temperature	-40°C ~+70°C	
Humidity	10%~95% (non-condensing)	
Altitude	-60m~3000m	
Pressure	86kPa~106kPa	

3. Daily Maintenance

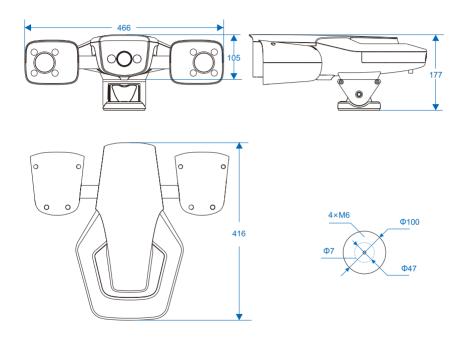
- Do not touch the heat component of the device directly to avoid empyrosis.
- When the lens is contaminated by dust or grease, use cotton cloth or lens clean cloth to wipe it off. When it is hard to clean, dip some lens cleanser and wipe gently and rotate outward from the middle until it is clean. Never 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.

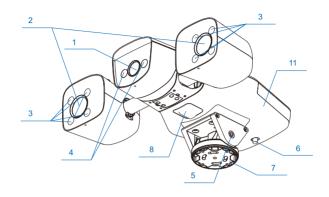
III Appearance and Interface

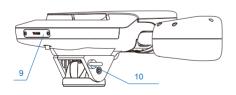
Dimensions



Unit: mm Net Weight: 9.6 kg

Components





No.	Component
	·
1	Panoramic Lens
2	Close-Up Lens
3	8 x IR Fill Light
4	2 x Warm Light Fill Light
5	Angle-Adjusting Screw
6	Tail Circuit
7	Horizontal Flange
8	WiFi Antenna
9	TF/SIM Card Slot
10	Hanging Ring
11	Main Cabin

Tail Circuit

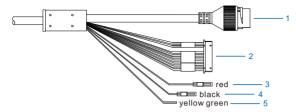


Table 1 Wiring Interface

No.	Interface Name	Function
1	Network port	Connect to network access devices like a switch
2	User cable group	Including alarm in / out, audio in / out, RS-485 serial port and etc.
3	Power supply (red)	Connect to the positive pole of DC 48V power supply
4	Power supply (black)	Connect to the negative pole of DC 48V power supply
5	PGND	Protective grounding

Table 2 User Cable Group Interface

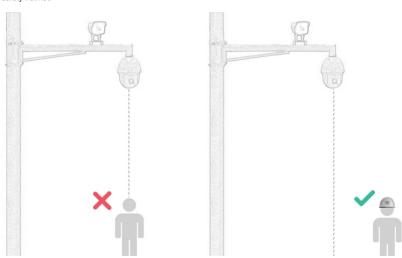
Interface	No.	Color	Name	Function
User Cable Group	1	Blue	AUDIO OUT	Audio output port for outputting audio signal
	2	Purple	AUDIO GND	Audio grounding port
	3	Grey	AUDIO IN	Audio input port for inputting audio signal or intercom
	4	White	ALARM GND	Alarm grounding port
	5	Pink	ALARM IN	Alarm input port for inputting alarm signal
	6	Light Green	ALARM OUT A	Alarm output port for outputting alarm signal
	7	White/Red	ALARM OUT B	
	9	Green	RS-485-A	RS-485 serial port to control peripheral devices such as third-party device
	11	Yellow	RS-485-B	

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

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 the weight as heavy as 8 times of the total weight of the camera and the
 accessories.
- 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.
- During installation, no man shall be allowed to move around in 2m under the camera, and all men should wear a safety helmet.

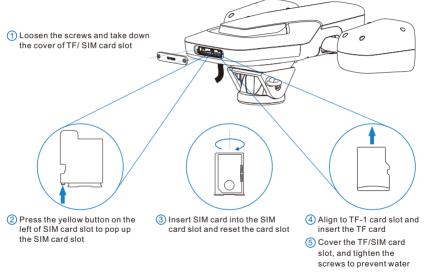


2. Install Storage Card and SIM Card (Optional, some models support)

Install a storage card in the camera to enable alarm snapshot and video recording. Installation steps are shown in the following picture.

[Note] 1) The maximum supported memory of TF card is 256G. After the TF card is inserted, hot-swapping is not recommended.

2) TF-1 is storage card slot and TF-2 is encryption card slot.



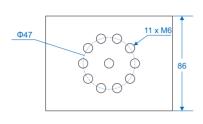
3. Camera Mounting

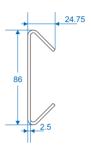
The camera supports cross-bar mount and wall bracket mount, the brackets of which are all optional. Please purchase separately if necessary.

[Attention] During installation, please do not take down the foam at the two sides of the main cabin to avoid being pinched. After finish installation, take down the foam so as to ensure the self-examination of the camera when it is electrified.

Cross-Bar Mount

Dimensions of the optional pillar bracket of this company:



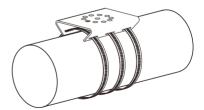


Unit: mm

The steps of cross-bar mounting:

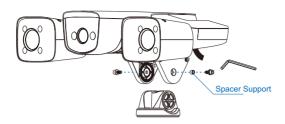
1) Install the pillar bracket. Loosen the snap joint on the clamp of the pillar; fix the pillar bracket onto the crossbar, tighten the snap joint on the clamp to fix the bracket.



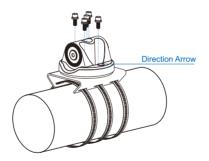


2) Take down the angle-adjusting screws at the two sides of the device, get out the spacer support and take down the horizontal flange.

[Attention] As the spacer support is too small, after getting it out, keep it well in case of loss.



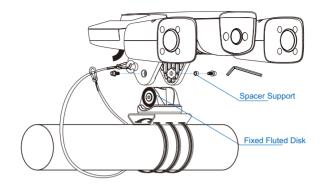
3) As the following picture shows, put the horizontal flange onto the pillar bracket and adjust the direction of the horizontal flange to make the direction arrow point rightly to the surveillance area. After finish adjustment, fix it with 5 pieces of M6 x 16 screws.



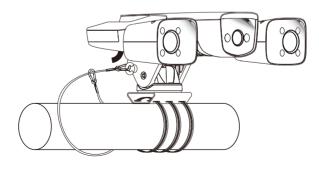
4) Take out the safety hook, hang one end of it onto the hanging ring of the camera, make the safety hook around the cross-bar and hang the other end onto the safety hook or the hanging ring of the camera;

As the following picture shows, mount the camera onto the horizontal flange and screw up the angle-adjusting screws on one side of the fixed fluted disk. Adjust the camera to proper angle of pitch so as to ensure the tight contact of the fixed fluted disk. Reset the spacer support, tighten the angle-adjusting screws at the two sides to fix the device

[Attention] During installation, do not forget the spacer support. Missing of the spacer support may affect the normal fixing of the device or further cause accident.

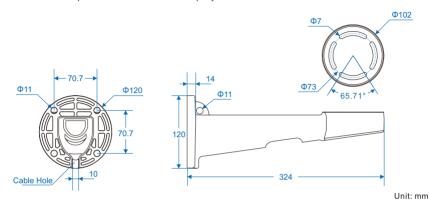


- 5) Connect cables according to the tags on the tail circuit of the camera and referring to the notes of the tail circuit. After finish connection, examine and sort out all the cables. Bind the connection part firmly with insulating tape and bind the sorted cables with spanner band.
- 6) After finish installation, peel off the plastic protective film on the lenses and take down the foam at the two sides of the main cabin of the camera. Power on the device.



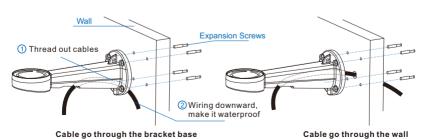
Wall Bracket Mount

Dimensions of the optional wall bracket of this company:



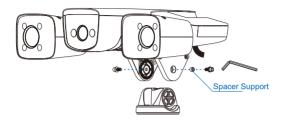
The steps of wall bracket mounting:

- 1) Thread the cables out of the bracket and reserve enough length of cable for connecting to the tail circuit of the camera.
- 2) Drill holes on the wall with the hole depth no less than 55 mm; insert the 4 expansion screws of M8 x 80, align the holes on the bracket base to the holes on the wall, and tighten the screw nuts.

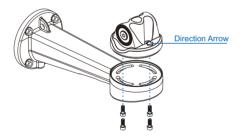


3) Take down the angle-adjusting screws at the two sides of the device, get out the spacer support and take down the horizontal flange.

[Attention] As the spacer support is too small, after getting it out, keep it well in case of loss.



4) As the following picture shows, put the horizontal flange onto the wall bracket and adjust the direction of the horizontal flange to make the direction arrow point rightly to the surveillance area. After finish adjustment, fix it with 4 pieces of M6 x 16 screws.

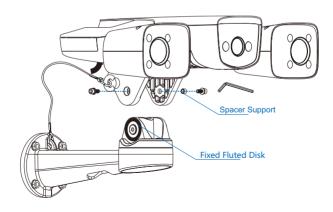


 $5) \, Take \, out \, the \, safety \, hook \, and \, hang \, one \, end \, of \, it \, onto \, the \, suspension \, loop \, of \, the \, wall \, bracket.$

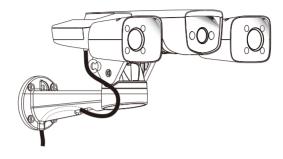


- 6) Hang the other end of the safety hook on the hanging ring of the camera.
- 7) As the following picture shows, mount the camera onto the horizontal flange and screw up the angle-adjusting screws on one side of the fixed fluted disk. Adjust the camera to proper angle of pitch so as to ensure the tight contact of the fixed fluted disk. Reset the spacer support, tighten the angle-adjusting screws at the two sides to fix the device.

[Attention] During installation, do not forget the spacer support. Missing of the spacer support may affect the normal fixing of the device or further cause accident.



8) Connect cables according to the tags on the tail circuit of the camera and referring to the notes of the tail circuit. After finish connection, examine and sort out all the cables. Bind the connection part firmly with insulating tape, bind the sorted cables with spanner band and put them inside the wall bracket.



9) After finish installation, peel off the plastic protective film on the lenses and take down the foam at the two sides of the main cabin of the camera. Power on the device.

V Login to Web Client

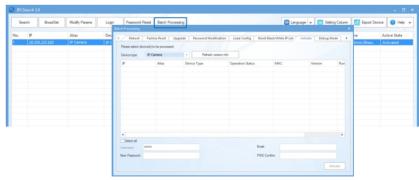
1. Minimum System Configurations and Requirements

- Processor: 3.3 GHz CORE®i3 series or other equivalent processors
- RAM Memory: 4GB or above
- Operating System: Windows XP or newer version
- Browser (32 bits): 360 browser, IE7.0 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, IPCSearch 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

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) Enter "http://ip:8080 in the address bar of the browser and come to the login interface of the web client. Enter user name and password to login the web client.



- 2) After login, download and install the plug-in (IE Kernal browser).
- 3) After entering the web client, select an idle window; select one channel from the list on the left and doubleclick it to display the image of the channel on the selected window.

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



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

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 3 m to 6 m. If there are many buses and trucks
 passing through in the scene, recommend installing the camera over 5 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 12° to 18°, and 15° is recommended.

2. 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 the actual environment and Appendix A: Reference of Installation Parameters.

[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.

2) Select the device to be configured, and you can configure the panorama, the left close-up and the right close-up scenes respectively. The panorama and close-up lenses have independent configuration parameters.

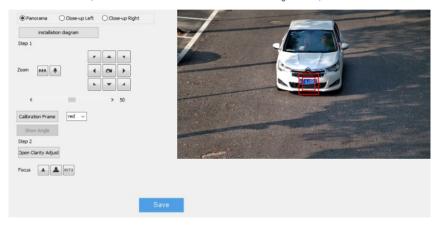
[Note] IPC2258-GiCN-SML50D has a fixed focal lens, so it does not support adjustment of field of view and focusing.



 Adjust camera field of view. It applies calibration frame adjustment. After finishing adjustment, click "Save" to validate settings.

[Note] Before adjusting the field of view of the close-up lens, control the PTZ buttons to adjust the direction of the close-up lens to make the center of the view facing the key surveillance area.

- a) Go to Intelligent > Settings > Install, select calibration frame color and click "Calibration Frame" to show the calibration frame in the selected color:
- b) Put the calibration board (or vehicle plate) sized 50 cm * 50 cm in the center of the image facing the lens;
- c) 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.



- 4) Focusing. The default focus mode of the camera is auto. Only when auto focusing cannot obtain clear images should user focus manually.
 - a) 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.
 - b) 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.
- 5) Click "Save" to validate settings. Configure panorama, close-up left and close-up right scenes successively according to the above steps.

[Attention]:

- 1) The clarity display function is available when the encoding format is H.264 or H.265.
- When adjusting image clarity, suggest using a richly-textured object as the adjustment board, such as newspaper.
- 3) After finishing installation configuration, click "Save" to validate settings and meanwhile lock the camera focal length. If you configure the camera focal length on other interfaces, the camera will restore to locking status automatically in 5 minutes.
- 4) After finishing lens adjustment, to avoid misoperation, lock the lens parameters by going to Settings > Camera > PTZ Lock, select the channel to be locked and select "Lens Lock" and "PTZ Lock". When the lens is locked, the lens parameters such as the field of view and focusing cannot be edited; when the PTZ is locked (for close-up lens), the PTZ control cannot be performed. If you want to re-adjust, deselect them.

3. 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. When the camera is used to capture vehicle plates, calibrate by referring to the vehicle plate.

- Go to Intelligent > Settings > Calibration, select a device and configure the panorama, the left close-up and the right close-up lenses to calibrate respectively.
- 2) 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 as wide as the vehicle 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.



- 3) 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 as wide as the plate:
 - [Attention] 1) During calibration, do not adjust the field of view, i.e. do not click the zoom in or zoom out icons.
 - After finishing installation configuration, click "Save" to validate settings and meanwhile lock
 the camera focal length. If you configure the camera focal length on other interfaces, the
 camera will restore to locking status automatically in 5 minutes.
- 4) Click "Save" to validate settings.

Appendix A: Reference of Installation Parameters

The following table is the reference parameters when installing the camera at the recommended angle of pitch, i.e. 15° .

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

IPC2258-GiCN-SML50D								
Installation Height	Angle of Pitch	Panorama		Close-Up				
		Surveillance Width	Snapshot Distance	Surveillance Width	Snapshot Distance			
3 m	15°	10 m	6 ~10 m	4 m	Following Lens			
4 m	15°	10 m	8 ~10 m	4 m	Following Lens			
IPC2258-GiCN-SML50								
Installation Height	Angle of Pitch	Panorama		Close-Up				
		Surveillance Width	Snapshot Distance	Surveillance Width	Snapshot Distance			
3 m	15°	7 m	6 ~10 m	4 m	Following Lens			
4 m	15°	8 m	8 ~12 m	4 m	Following Lens			
5 m	15°	9 m	10 ~12 m	4 m	Following Lens			
6 m	15°	9 m	13 ~15 m	4 m	Following Lens			

Appendix B: DC48V Wire Diameter VS. Transmission Distance

The recommended max transmission distance when the wire diameter is certain and the DC48V voltage loss rate is less than 10%

(For DC48V powered devices, the maximum allowed voltage loss rate is 10%. All the wires in the following table are cooper wires, whose electrical resistivity is $\rho = 0.0175\Omega^* mm^2/m$)

Diameter mm (feet) Power W	0.8 (20AWG)	1.0(18AWG)	1.25(16AWG)	2.0(12AWG)
5	612 (2006)	969 (3179)	1536 (5039)	3905 (12812)
10	306 (1003)	484 (1590)	768 (2520)	1953 (6406)
15	204 (669)	323 (1060)	512 (1680)	1302 (4271)
20	153 (502)	242 (795)	384 (1260)	976 (3203)
25	122 (401)	194 (636)	307 (1008)	781 (2562)
30	102 (334)	162 (530)	256 (840)	651 (2135)
35	87 (287)	138 (454)	219 (720)	558 (1830)
40	76 (251)	121 (397)	192 (630)	488 (1601)
45	68 (223)	108 (353)	171 (560)	434 (1424)
50	61 (201)	97 (318)	154 (504)	391 (1281)
55	56 (182)	88 (289)	140 (458)	355 (1165)
60	51 (168)	81 (265)	128 (420)	325 (1068)
65	47 (154)	75 (245)	118 (388)	300 (986)
70	44 (143)	69 (227)	110 (360)	279 (915)
75	41 (134)	65 (212)	102 (336)	260 (854)
80	38 (125)	61 (199)	96 (315)	244 (801)
85	36 (118)	57 (187)	90 (296)	230 (754)
90	34 (111)	54 (177)	85 (280)	217 (712)
95	32 (106)	51 (167)	81 (265)	206 (674)
100	31 (100)	48 (159)	77 (252)	195 (641)

[Note] The requirements of diameter apply to single, solid and round cooper wire. The AWG value of multistranded 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

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