

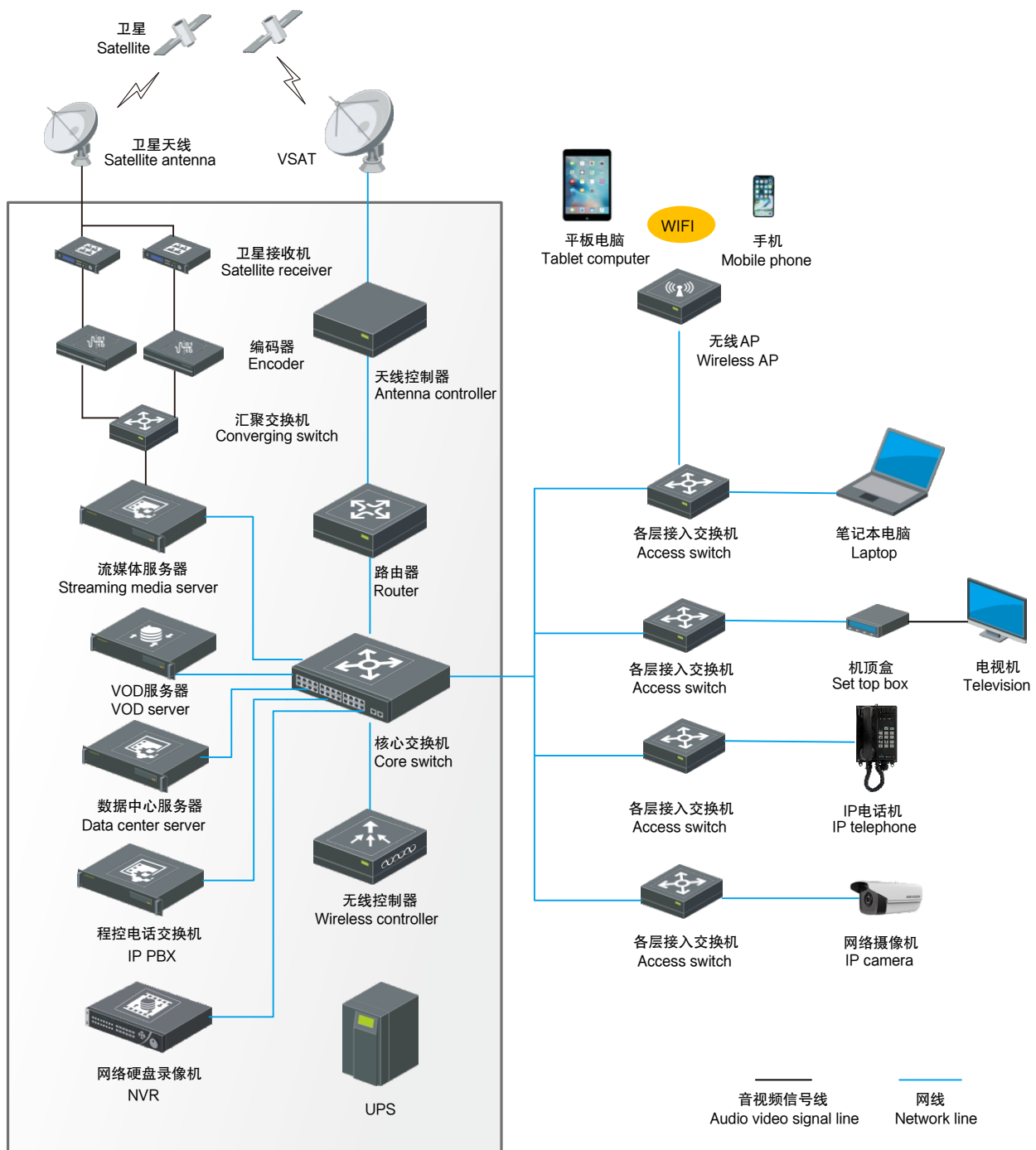
MINS 船舶综合网络系统 Marine integrated network system

概述 General description

船舶综合网络系统是一种融合了船舶局域网系统、IPTV系统、IP电话系统和监控系统的综合性网络系统。它将各自独立的专业网络融合成综合性网络，极大的减少了网络布线的投入并简化了网络管理，降低了维护成本。

Marine integrated network system is a comprehensive network system which integrates ship LAN system, IPTV system, IP telephone system and monitoring system. It will merge the separated professional network into a comprehensive network, greatly reducing the network wiring investment and simplifying the network management as well as decreasing the maintenance cost.

船舶综合网络系统 Marine integrated network system



船舶综合网络系统-局域网系统
Marine integrated network system-LAN system

概述 General description

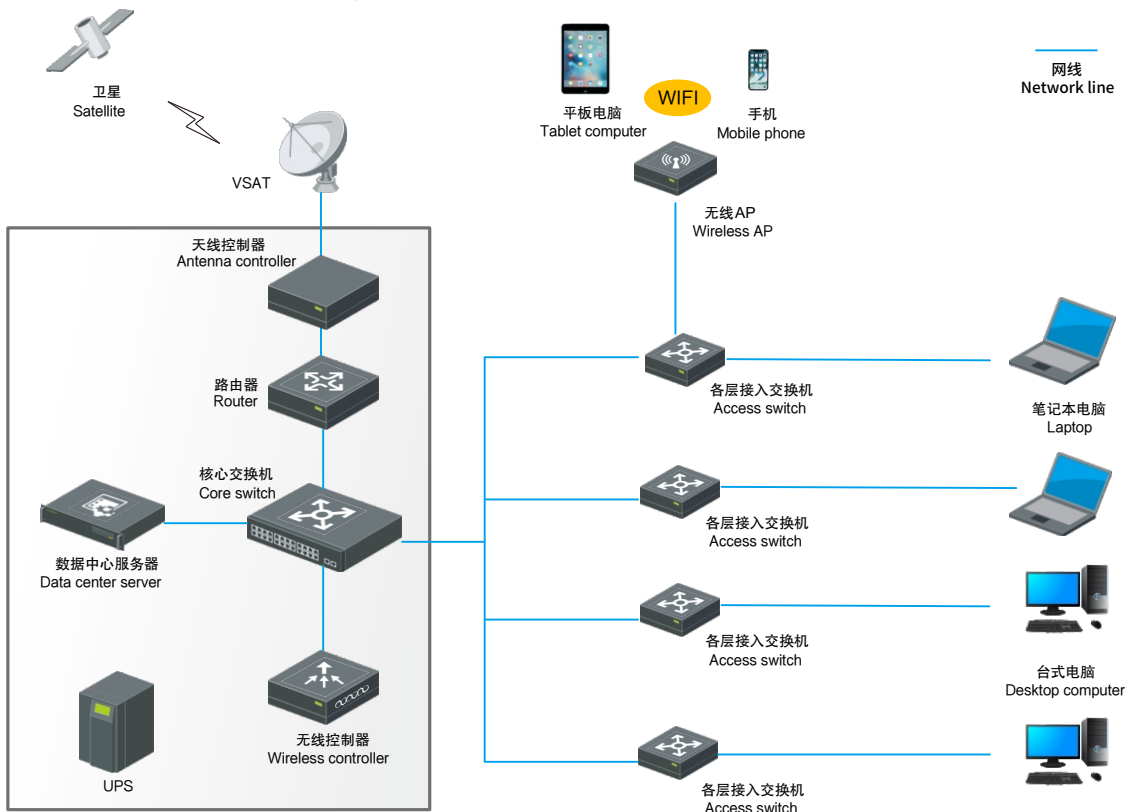
局域网系统是船舶综合网络系统的重要组成部分，它连接船上所有网络设备，包含服务器、交换机、路由器、计算机、监控摄像头、IPTV和IP电话等。

LAN system is an important part of ship integrated network system. It connects all network equipment on the ship, including servers, switches, routers, computers, surveillance cameras, IPTV and IP phones.




设备组成 Device Composition

序号 S/N	型号 Model	名称 Name	主要材质 Main material	防护等级 IP class
1	KX-ROU	路由器 Router	碳钢 Carbon steel	IP 20
2	KX-AP	无线AP Wireless AP	阻燃ABS Fire retardant ABS	IP 20
3	KX-AP-F	无线AP Wireless AP	合金铝 Aluminum alloy	IP 67
4	KX-AC	无线控制器 Wireless controller	碳钢 Carbon steel	IP20
5	KX-7148	核心交换机 Core switch	碳钢 Carbon steel	IP 20
6	KX-7124-P	接入交换机 Access switch	碳钢 Carbon steel	IP 20
7	KX-9408-2TQ	服务器 Server	碳钢 Carbon steel	IP 20
8	KX-UPS	UPS UPS	碳钢 Carbon steel	IP 20



局域网系统方案 LAN system solutions



无线控制器、无线AP Wireless controller、Wireless AP

名称 Name	无线控制器 Wireless controller	无线AP Wireless AP	无线AP Wireless AP
型号 Model	KX-AC	KX-AP	KX-AP-F
产品外观 Product picture			
技术规格 Technical specifications	<p>转发能力:2 Gbit/s 无线用户接入能力:1K 最大可管理AP数量: 48 无线协议: 802.11a/b/g/n/ac wave2 最大功耗: 25.6W</p> <p>Forwarding capability:2 Gbit/s Maximum number of access users:1K Maximum number of manageable AP:48 Radio protocols:802.11a/b/g/n/ac wave2 Maximum power loss: 25.6W</p>	<p>电源输入:DC12V POE供电 最大功耗:12.1W 可同时在线用户数量:≤512 最大发射功率:2.4G 23dBm 5G 23dBm 无线协议: 802.11a/b/g/n/ac wave2 最高速率:1.267Gbit/s</p> <p>Power input:DC12V POE power supply Maximum power loss:12.1W Max number of users:≤512 Maximum transmit power:2.4G 23dBm 5G 23dBm Radio protocols: 802.11a/b/g/n/ac wave2 Maximum speed:1.267Gbit/s</p>	<p>电源输入:POE供电 最大功耗:20.1W 可同时在线用户数量:≤256 最大发射功率:2.4G 28dBm 5G 26dBm 无线协议: 802.11a/b/g/n/ac 最高速率:1.75Gbps</p> <p>Power input:POE power supply Maximum power loss:20.1W Max number of users:≤256 Maximum transmit power: 2.4G 28dBm 5G 26dBm Radio protocols: 802.11a/b/g/n/ac Maximum speed:1.75Gbps</p>

交换机、路由器 Network switch、Router

名称 Name	核心交换机 Core switch	接入交换机 Access switch	路由器 Router
型号 Model	KX-7148	KX-7124-P	KX-ROU
产品外观 Product picture			
技术规格 Technical specifications	<p>交换容量: 680Gbps/6.8Tbps 包转发率: 420Mpps 固定端口: 48 × 10/100/1000Base-T 4 × 10 GE SFP+ VLAN特性:支持4K个VLAN 支持GuestVLAN、Voice VLAN 支持GVRP协议</p> <p>Switching capacity:680Gbps/6.8Tbps Packet forwarding rate:420Mpps Fixed ports:48 × 10/100/1000Base-T 4 × 10 GE SFP+ VLAN features:4K VLANs Guest VLAN Voice VLAN GVRP</p>	<p>交换容量: 336Gbps/3.36Tbps 包转发率: 144Mpps/166Mpps 固定端口: 48 × 10/100/1000Base-T 4 × 10 GE SFP+</p> <p>Switching capacity:336Gbps/3.36Tbps Packet forwarding rate:144Mpps/166Mpps Fixed ports:48 × 10/100/1000Base-T 4 × 10 GE SFP+</p>	<p>端口:6 × GE+2 × GE Combo 转发能力:2 Mpps 固定WAN接口: 2 × GE(1 × Combo) 固定LAN接口: 8 × FE</p> <p>Interface types:6 × GE+2 × GE Combo Forwarding capability:2 Mpps Fixed WAN ports:2 × GE(1 × Combo) Fixed LAN ports:8 × FE</p>

船舶综合网络系统-IPTV系统

Marine integrated network system-IPTV system

概述 General description

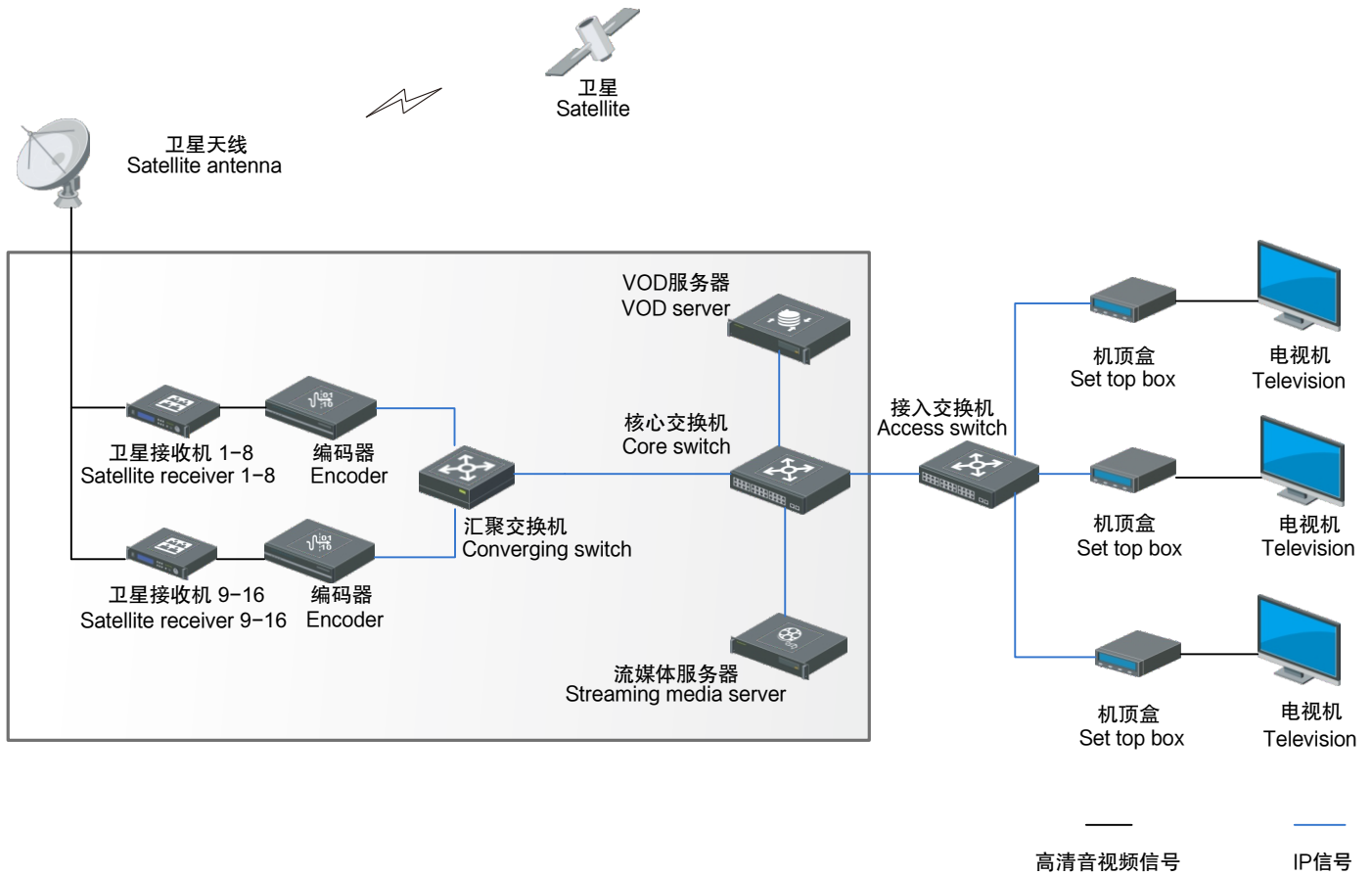
IPTV系统是为了满足船舶在互联网信息时代的全新需求而设计，系统利用船舶局域网系统的基础设施、以机顶盒作为主要终端设备，集Internet、多媒体和通信等多种技术于一体，通过Internet协议,向终端提供包括数字电视在内的多种交互式数字媒体服务。IPTV系统不仅满足了乘客及船员在娱乐、多媒体和互联网信息方面的需求，同时也为业主创造了全新的服务模式和管理体验。

IPTV system is designed to meet the demand for shipping in the age of onterney information. The system utilizes the infrastructure of the vessel LAN system and a set-top box as the main terminal equipment, integrated internet, multimedia and correspondence into an unity, and provides the terminals a variety of interactive digital media services that includes digital television service. Not only does the IPTV system meet the requirement of recreation, multimedia and internet of passengers and crew, but also creates a new service mode and management experience for users.




设备组成 Device Composition

序号 S/N	型号 Model	名称 Name	主要材质 Main material	防护等级 IP class
1	KSA-600	船载卫星电视天线 Satellite TV antenna	阻燃ABS Fire retardant ABS	IP 56
2	KSA-DEC	卫星接收机 Receiver of satellite	碳钢 Carbon steel	IP 20
3	KSA-2016	切换开关 Switch	碳钢 Carbon steel	IP 20
4	KSA-ENC	编码器 Encoder	碳钢 Carbon steel	IP 20
5	KX-7112	汇聚交换机 Convergence switch	碳钢 Carbon steel	IP20
6	KSA-SMS	流媒体服务器 Stream media server	碳钢 Carbon steel	IP20
7	KX-VOD	VOD服务器 VOD server	碳钢 Carbon steel	IP 20
8	KSA-DEC/IP	机顶盒 Set top box	碳钢 Carbon steel	IP 20

IPTV系统方案 IPTV System solutions



编码器、汇聚交换机、VOD服务器 Encoder、Convergence switch、VOD server

名称 Name	编码器 Encoder	汇聚交换机 Convergence switch	VOD服务器 VOD server
型号 Model	KSA-ENC	KX-7112	KX-VOD
产品外观 Product picture			
技术规格 Technical specifications	输入接口: HDMI、ASI 输出接口: ASI、IP 分辨率: 1080 × 50/60p/i, 720p等 采样频率: 32KHz、44.1KHz、48KHz 码率: 64、128、192、256、384Kbps Input interface: HDMI、ASI Output interface: ASI、IP Resolution ratio: 1080 × 50/60p/i, 720p etc Sample frequency: 32KHz、44.1KHz、48KHz Bit rate: 64、128、192、256、384Kbps	包转发率: 27Mpps/84Mpps 交换容量: 336Gbps/2.56Tbps 固定端口: 8 × 10/100/1000Base-T 输入电压: 100-240V AC 50-60Hz 最大功耗 12.85W Packet forwarding rate: 27Mpps/84Mpps Switching capacity: 336Gbps/2.56Tbps Fixed ports: 8 × 10/100/1000Base-T Power supply: 100-240V AC 50-60Hz Maximum power loss: 12.85W	CPU: Xeon E5-2603 v3 CPU频率: 1.6GHz 三级缓存: 15MB CPU: Xeon E5-2603 v3 CPU frequency: 1.6GHz Level 3 cache: 15MB

船舶综合网络系统-IP电话系统 Marine integrated network system-IP phone system

概述 General description

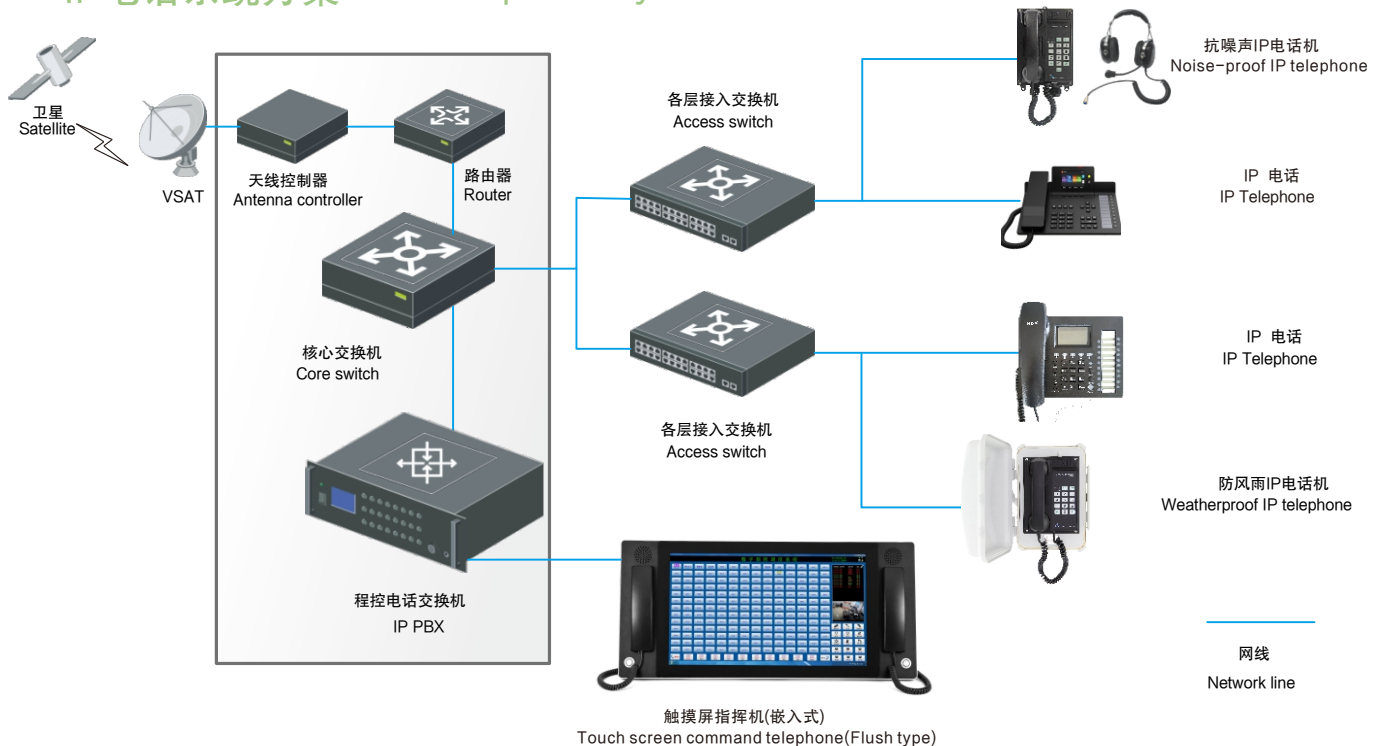
IP电话系统是在船舶局域网的基础上,增加网络通讯服务器并接入IP电话终端所构成的语音交换通信系统。IP电话系统不仅满足了船舶内部各部门之间的通讯,还可以通过卫星通讯接口,享受低廉的通讯费用,达到船与船之间和船与岸地之间语音通讯。

IP telephone system is a voice exchange communication system which is based on the ship local area network, adding network communication server and accessing IP telephone terminal. IP telephone system not only meets the communication between the various departments within the ship, but also can enjoy the low communication cost through the satellite communication interface, and achieve the voice communication between the ship and the ship and the land.

设备组成 Device Composition

序号 S/N	型号 Model	名称 Name	主要材质 Main material	防护等级 IP class
1	KJ-4	程控电话交换机 IP network integrated communication main unit	碳钢 Carbon steel	IP 22
2	KZH-3Q	触摸屏指挥机(嵌入式) Touch screen command telephone(Flush type)	碳钢、合金铝 Carbon steel, Aluminum alloy	IP 22
3	KH-1T/G/IP	IP电话机(台式&壁挂式) IP telephone (Desk&wall mount)	阻燃ABS Fire retardant ABS	IP 20
4	KH-1SQ/IP	IP电话机(嵌入式) IP telephone(Flush type)	阻燃ABS Fire retardant ABS	IP 22
5	KH-1SG/IP	IP电话机(壁挂式) IP telephone(Wall mount)	阻燃ABS Fire retardant ABS	IP 44
6	KH-1J/IP	抗噪声IP电话机 Noise-proof IP telephone	阻燃ABS Fire retardant ABS	IP 44
7	KH-1SF/IP	防风雨IP电话机 Weatherproof IP telephone	阻燃ABS Fire retardant ABS	IP 56

IP电话系统方案 IP telephone system solutions



IP 电话机 IP telephone

名称 Name	触摸屏指挥机(嵌入式) Touch screen command telephone(Flush type)	IP电话机(台式&壁挂式) IP telephone (Desk&wall mount)
型号 Model	KZH-3Q	KH-1T/G/IP
产品外观 Product picture		
颜色 Color	黑色 Black (RAL9005)	黑色 Black (RAL9005)
功能特点 Functional features	<p>功能特点:</p> <p>指挥机采用图形界面, 操作直观简便 提供16组会议组, 最大64方同时会议 一键召开组内成员电话会议 按键个性化定制 键区指定翻页, 设置翻页键, 便于管理</p> <p>Functional features: The command machine adopts graphical interface, and the operation is intuitive and simple Provide 16 meeting groups, allow maximum of 64 parties at simultaneous meeting One key to hold group members conference call Key customization Key area specified page turn, set page turn key, easy to manage</p>	<p>功能特点:</p> <p>20个内置多功能键 丰富外部接口 通话保持 来电显示 三方会议 呼叫转接 呼叫转移</p> <p>Functional features: 20 built-in multi-function keys Enrich external interface Calls to keep Caller ID Tripartite meeting Call transfer Call forwarding</p>

IP 电话机 IP telephone

名称 Name	IP电话机(壁挂式、嵌入式) IP telephone(Wall mount、Flush type)	抗噪声IP电话机 Noise-proof IP telephone	防风雨IP电话机 Weatherproof IP telephone
型号 Model	KH-1SG/IP、KH-1SQ/IP	KH-1J/IP	KH-1SF/IP
产品外观 Product picture			
颜色 Color	黑色 Black (RAL9005)	黑色 Black (RAL9005)	海灰色 Sea gray (RAL7035)
功能特点 Functional features	<p>功能特点:</p> <p>重拨 呼叫等待 自动接听 通话保持 多方会议 呼叫等待 呼叫转接 呼叫转移</p>	<p>Functional features:</p> <p>Redial Call waiting Automatic answer Calls to keep Multi-party conference Call waiting Call transfer Call forwarding</p>	