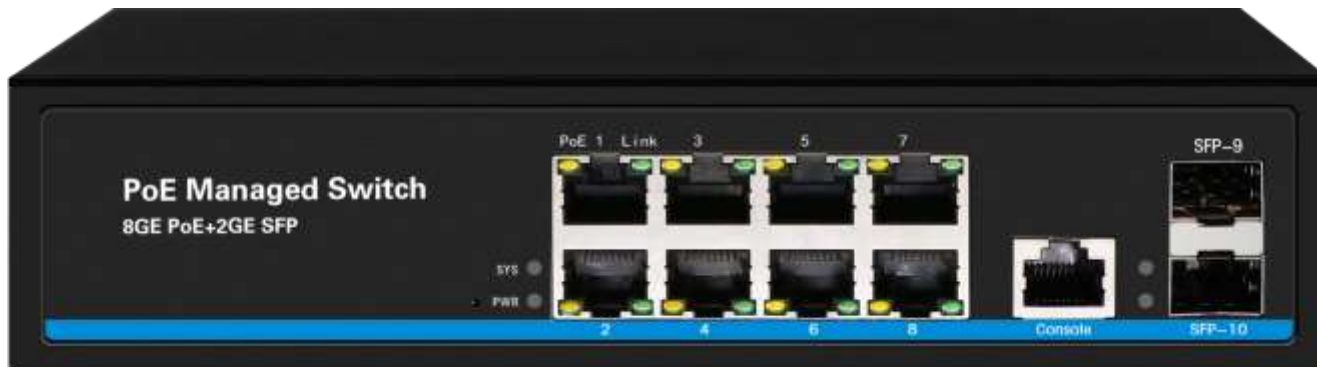




Data Sheet HTK-7010-10P-POE

HTK-7010-10P - 8-Port POE Gigabit Layer 2 Managed Switch with 2 SFP Ports

Product Appearance:



Product Overview:

HTK7010-10P is a L2+ managed PoE fiber switch, which is equipped with 8* 10/100/1000M RJ45 ports and 2*100/1000M SFP fiber slot ports. Port 1-8 can support IEEE802.3af/at PoE standard, built-in 150W power supply, fan less design. HTK7010-10P supports software-based IPv4/IPv6 static routing, spanning tree, DHCP and other management functions, can meet various requirements of CCTV surveillance, wireless AP , VoIP and other SMB projects.

Rich PoE Management Function

Being the managed PoE switches for CCTV surveillance, wireless and VoIP networks, HTK7010-10P feature the following special PoE management functions:

- PoE PD-alive check
- Scheduled power rebooting
- PoE schedule
- PoE usage monitoring
- Soft-reboot PoE Non-stop
- PoE port power feeding priority

Smart PoE PD-Alive Check

HTK-7010-10P can be configured to monitor connected PD status in real time. Once the PD stops working and responding, HTK-7010-10P will resume the PoE port power and bring the PD back to work. They will greatly enhance the network reliability through the PoE port resetting the PD's power source and reducing administrator management burden.

Highlights:

- Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP Snooping, DHCP Snooping, LLDP, POE+ management, IP Source Guard, ARP inspection, ACLs etc.
- Support spanning tree STP (802.1D) and RSTP (802.1W) and MSTP (802.1s).
- Support enhanced management through WEB, CLI, TELNET, SSH, SNMP.
- Support cable diagnosis and SFP DDM.
- Support PoE management, like PoE schedule, PoE PD-alive.
- Support G.8032 quick ring protocol. Self-recovery time <20ms.
- Support IEEE1588 v2, transparent clock(TC)
- Support DDM, SFP digital diagnostics monitoring
- Support IPV4 and IPV6 static routing functions
- Support memory and CPU monitoring
- 4KV surge protection, 6KV contact/8KV air

Hardware Specification:

Model	HTK-7010-10P
Copper Ports	8-10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
Fiber Ports	2x1G BASE-X SFP interfaces, supports 100M/1G Mbps dual mode
PoE Ports	1~8-802.3af/802.3at PoE Injector Ports
Console Ports	1 x RS-232-to-RJ45 serial port (115200, 8, N, 1)
Switch Architecture	Store-and-Forward
Switch Fabric	20 Gbps/non-blocking
Throughput	14.88Mpps @64 bytes
Address Table	8K entries
Share Data Buffer	4 Mb
Jumbo Frame	9600 Bytes
SDRAM	1Gb
Flash Memory	128Mb
Flow Control	IEEE 802.3x pause frame for full-duplex Back pressure for half-duplex
Reset Button	>2 sec.: Factory default and reset
Power Supply	100~240V AC, 50/60Hz, 4A (max.)
Power Consumption	Max.150 watts/1122 BTU
PoE Standards	IEEE 802.3af Power over Ethernet/PSE IEEE 802.3at Power over Ethernet Plus/PSE
PoE Power Supply Type	Per Port 52V DC, 300mA. Max. 15.4 watts (IEEE 802.3af) Per Port 52V DC, 600mA. Max. 30 watts (IEEE 802.3at)
LED Indicators	Power: Green Solid on- power work normal, off- power disconnected

	<p>System: Green Blink -work normally, solid on- soft work abnormal, fast Blink – soft upgrade</p> <p>PoE: Yellow Solid on- PoE work normally, Off- PoE doesn't work, Blink - PoE overload</p> <p>10/100/1000T RJ45 Interfaces (Port 1 to Port 8): 1000 LNK/ACT (Green) Blink - port connected with data transmission; Solid on- port connected without data transmission</p> <p>100/1000Mbps SFP Interfaces (Port 9 to Port 10): Green Blink - port connected with data transmission; Solid on- port connected without data transmission</p>
EMC	<p>Surge Immunity: 4KV Per: IEC61000-4-5 ESD Protection: ESD Level 4 Per: IEC61000-4-2 EFT Level 4 Per: IEC61000-4-4</p>
Dimension	206x140x44.5mm
Weight	2 kg
Working Temperature	-10 °C to 45 °C
Storage Temperature	-20 °C to 70 °C
MTBF	50,000hrs

Layer 2 functions:

Port configuration	<ul style="list-style-type: none"> Auto-negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor CPU Mirror Traffic statistics
Link Aggregation	<ul style="list-style-type: none"> Static link aggregation LACP (Dynamic Trunk/Static Trunk) Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	<ul style="list-style-type: none"> Aging Time Static MAC address Dynamic MAC address management
VLAN	<ul style="list-style-type: none"> 4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLAN MAC VLAN Voice VLAN 802.1ad Q-in-Q tunneling Private VLAN (Protected port) GARP/GVRP
ACL	<ul style="list-style-type: none"> 256ACLs L2, L3 e L4 Time-based ACL IP ACL MAC ACL MAC-IP ACL User-Defined ACL ICMPv6
Spanning tree	<ul style="list-style-type: none"> 802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP)

	<p>802.1s Multiple Spanning Tree Protocol (MSTP)</p> <p>Loop Guard</p> <p>Root Guard</p> <p>TC-BPDU Guard</p> <p>BPDU Guard</p> <p>BPDU Filter</p>
Ring Protection	<p><20ms G.8032 ERPS Ring</p> <p>Fast Ring</p>
Multicast	<p>256 groups</p> <p>IGMP v1/v2/v3 Snooping, Fast Leave</p> <p>MLD Snooping</p> <p>Multicast VLAN</p> <p>IGMP filter</p> <p>MVR</p> <p>Multicast Routing</p>
QOS	<p>8 mapping IDs to 8 level priority queues</p> <p>CoS port-based</p> <p>CoS 802.1p-based</p> <p>CoS DSCP-based</p> <p>Scheduling algorithms SP, WRR, SP+WRR</p> <p>Storm Control (Broadcast, Multicast, Unknown Unicast)</p> <p>Bandwidth control per port</p> <p>SWRR, DWRR for Scheduling</p> <p>Flow Redirect</p> <p>Precedence</p> <p>TOS</p> <p>Rate Limiting (Ingress/Egress)</p> <p>Stri Priority</p>
Security Features	<p>Port Security</p> <p>MAC address filter</p> <p>ARP Association (Manual, ARP scanning, DHCP snooping)</p> <p>ARP Protection</p> <p>AAA</p> <p>DAI</p> <p>DoS (Denial of Service)</p> <p>Classification of packages based on: End.MAC, IP End, TCP / UDP Ports,</p>

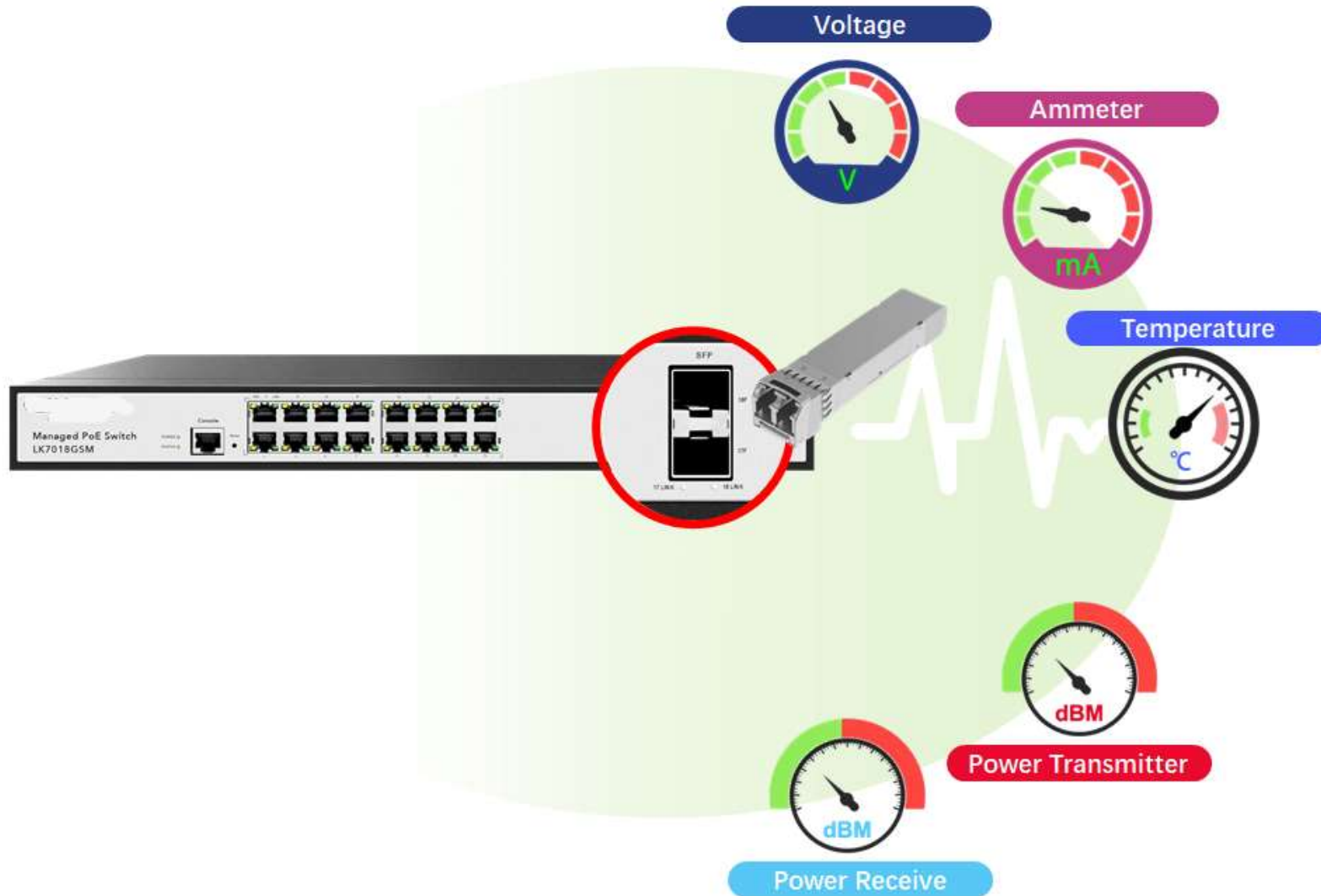
	<ul style="list-style-type: none"> Protocol Type; 802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication RADIUS Authentication DHCP Filter Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2 Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection
Management	<ul style="list-style-type: none"> SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration Backup/Reload Dual Firmware LLDP Configuration Export/Import CDP Aware OAM (IEEE802.3ah) CFM (IEEE802.1ag) SFlow
Synchronization, IEEE1588	Support IEEE1588v2 transparent clock
Other Features	<ul style="list-style-type: none"> DNS Client DHCP Relay DHCP Client DHCP Snooping DHCP Option 66 DHCP Option 67 DHCP Option 82 NTP/SNTP Client UPNP UDLD

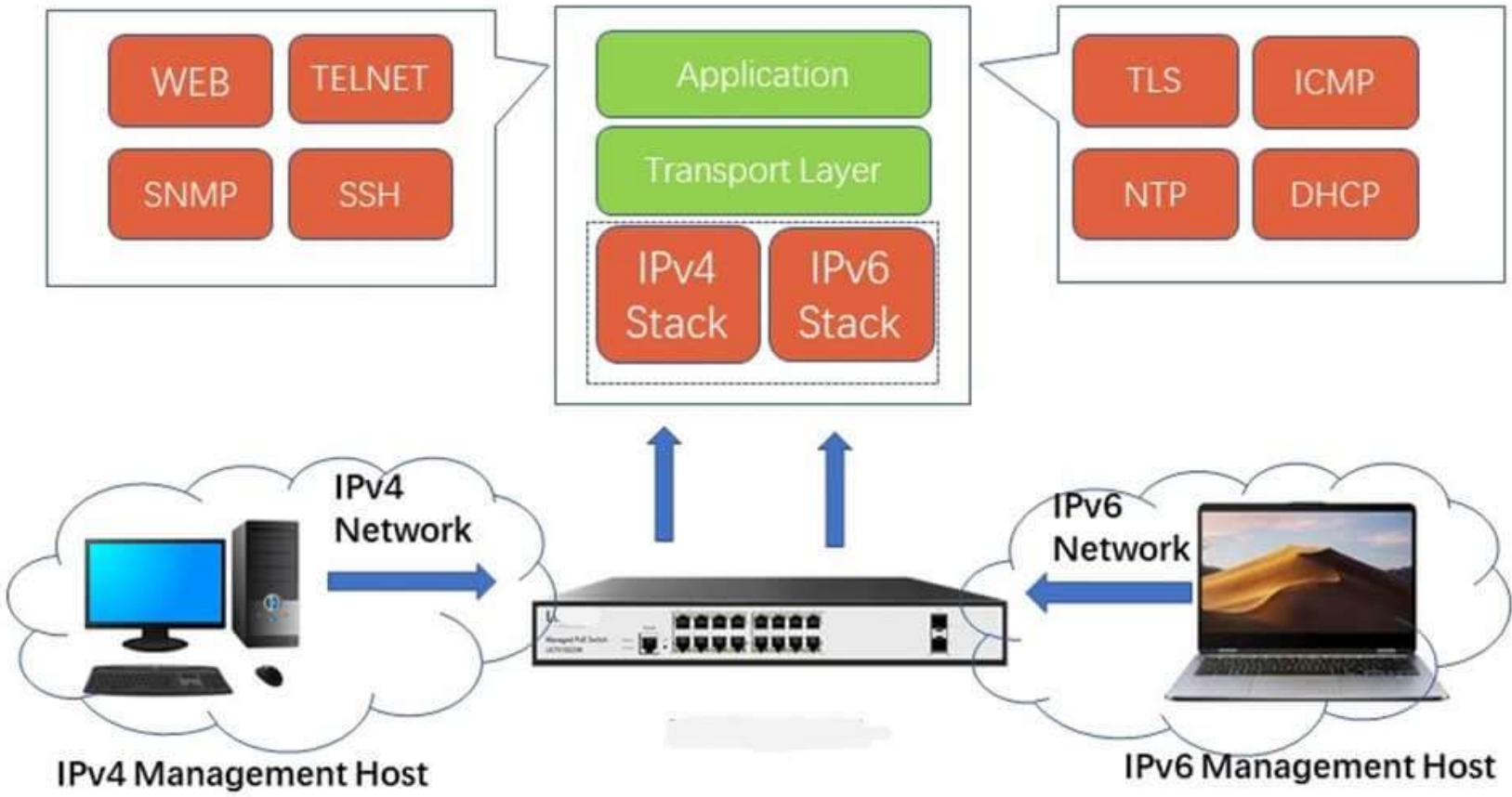
PoE management	<ul style="list-style-type: none"> Total PoE power budget control Per port PoE function enable/disable PoE admin-mode control PoE port power feeding priority Per PoE port power limitation PD classification detection PD alive check PoE schedule Soft-reboot PoE Non-stop
Maintenance	<ul style="list-style-type: none"> Cable Diagnostics Ping SFP DDM (Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring

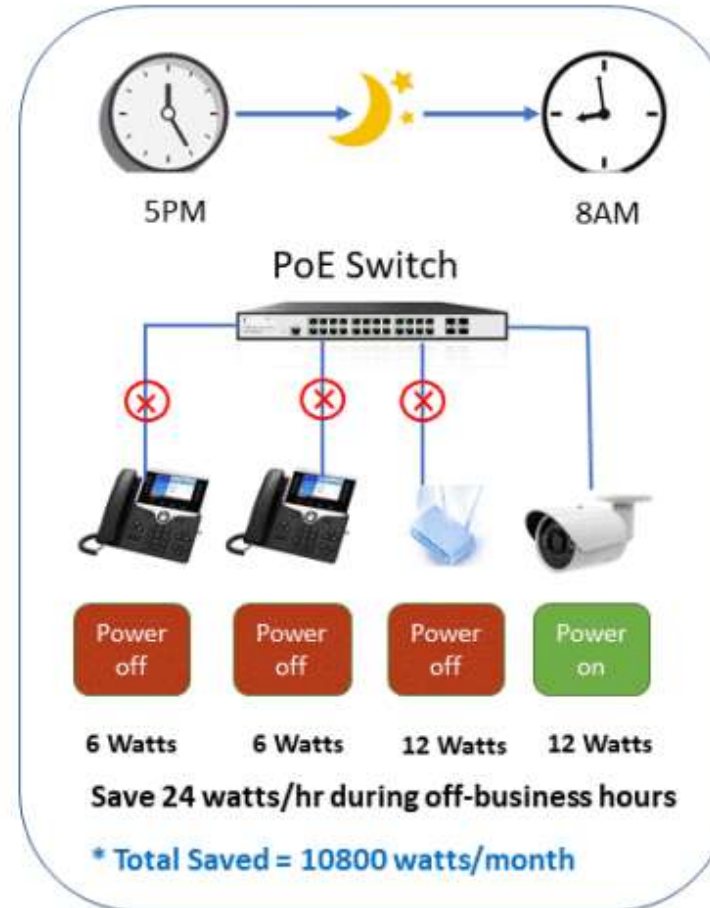
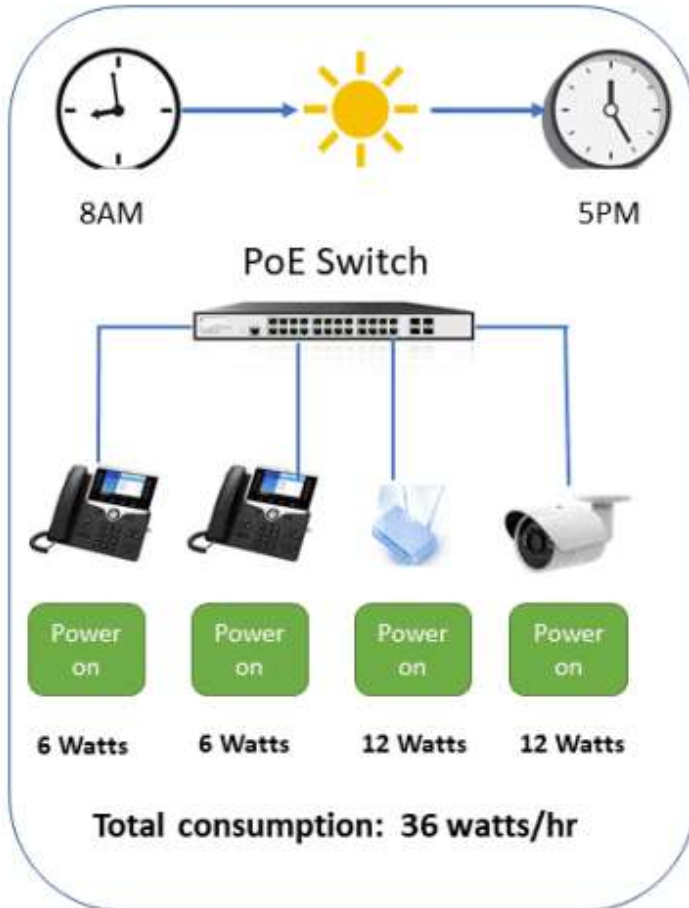
Layer 3 functions:

Static Routing	<ul style="list-style-type: none"> IPv4 Unicast: Static Routing(Software Base) IPv6 Unicast: Static Routing(Software Base)
IPV6	<ul style="list-style-type: none"> IPv6 neighbor discovery (ND) Path maximum transmission unit (MTU) discovery Internet Control Message Protocol (ICMP) version 6 TCPv6/UDPv6 Ping6 Telnet(v6) Http/Https Interface IPV6 ACL IPV6

Digital Diagnostic Monitor (DDM)







1000 BASE-T UTP With PoE

Solution Diagram:

