



Data Sheet GTK-8044-28F12G4XFP

GTK-8044-28F12G4XFP - 10G Uplink Aggregation Managed Switch 28 SFP Ports with 12 Ethernet Ports

Product Appearance:



Product Overview:

L2+ managed 10G uplink Ethernet core routing switch with 12*10/100/1000M RJ45 ports and 28*100/1000M SFP ports and 4*1/10G SFP+ fiber slot ports. built-in 60W power supply. 19 inch 1U cabinet installation.

- **10Gbps Uplink Capacity for Big Bandwidth Application**
- **Solution for IPv6 Networking**
- **Robust Layer 2+ Features**
- **Powerful Security Functions**
- **Enhanced Security and Traffic Control**
- **User-friendly Secure Management**
- **Intelligent SFP DDM Function**

Highlights:

- Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP Snooping, DHCP Snooping, LLDP, 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 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 protection

Hardware Specification:

Model	GTK-8044-28F12G4XFP
Copper Ports	12-10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports
Fiber Ports	28x1G BASE-X SFP interfaces
Fiber Ports	4x1G/10GBASE-X SFP interfaces, supports 1G/10Gbps dual mode
Console Ports	1 x RS-232-to-RJ45 serial port (115200, 8, N, 1)
Switch Architecture	Store-and-Forward
Port Switching Capacity	176Gbps/non-blocking
Box Switching capacity	350Gbps/non-blocking
Throughput	130.94Mpps @64 bytes
Address Table	32K entries
Share Data Buffer	32Mb
Jumbo Frame	9600 Bytes
SDRAM	2Gb
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.)

LED Indicators	<p>Power: Green Solid on- power work normal, off- power disconnected</p> <p>System: Green Blink -work normally, solid on- soft work abnormal, fast Blink – soft upgrade</p> <p>10/100/1000T RJ45 Interfaces (Port 1 to Port12): 1000 LNK/ACT (Green) Blink - port connected with data transmission; Solid on- port connected without data transmission</p> <p>100/1000Mbps SFP Interfaces (Port 13 to Port 40): Green Blink - port connected with data transmission; Solid on- port connected without data transmission</p>
EMC	<p>Surge Immunity: 4KV Per: IEC61000-4-5</p> <p>ESD Protection: ESD Level 4 Per: IEC61000-4-2</p> <p>EFT Level 4 Per: IEC61000-4-4</p>
Dimension	440x290x44.5mm
Weight	6.5kg
Working Temperature	-10 °C to 45 °C
Storage Temperature	-20 °C to 70 °C
MTBF	50,000hrs

Layer 2 functions:

Port configuration	<p>Auto-negotiation</p> <p>Flow Control</p> <p>Port Mirror: TX/RX/BOTH; Many-to-1 monitor</p> <p>CPU Mirror</p> <p>Traffic statistics</p>
Link Aggregation	Static link aggregation

	LACP (Dynamic Trunk/Static Trunk) Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	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	256ACLs L2, L3 e L4 Time-based ACL IP ACL MAC ACL MAC-IP ACL User-Defined ACL ICMPv6
Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring

	Fast Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN IGMP filter MVR Multicast Routing
QOS	8 mapping IDs to 8 level priority queues CoS port-based CoS 802.1p-based CoS DSCP-based Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port SWRR, DWRR for Scheduling Flow Redirect Precedence TOS Rate Limiting (Ingress/Egress) Stri Priority
Security Features	Port Security MAC address filter ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection AAA DAI DoS (Denial of Service) Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type; 802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication RADIUS Authentication

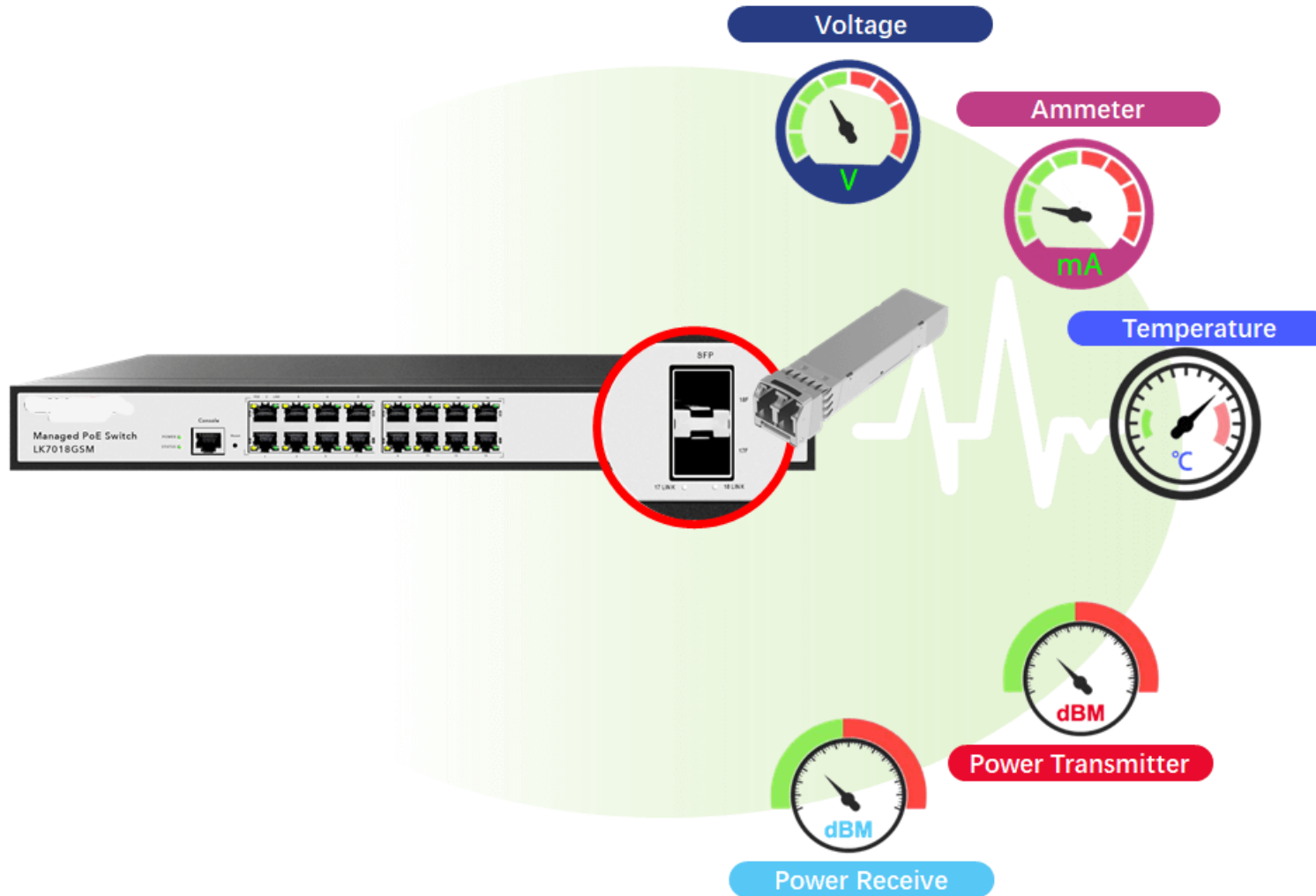
	DHCP Filter Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2 Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection
Management	SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP 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	DNS Client DHCP Relay DHCP Client DHCP Snooping DHCP Option 66 DHCP Option 67 DHCP Option 82 NTP/SNTP Client UPNP UDLD
Maintenance	Cable Diagnostics

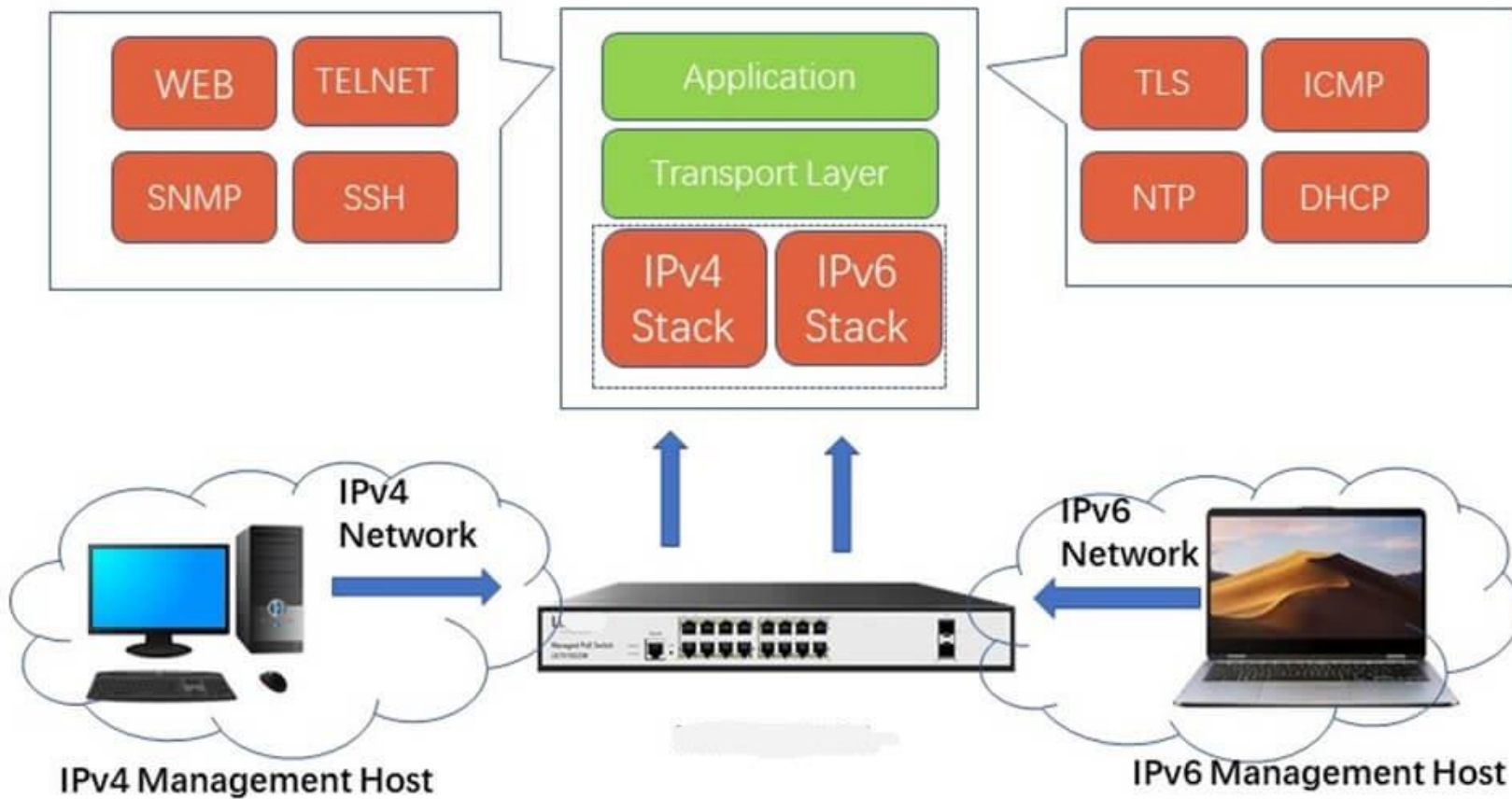
	Ping SFP DDM (Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring
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Layer 3 functions:

Static Routing	IPv4 Unicast: Static Routing(Software Base) IPv6 Unicast: Static Routing(Software Base)
IPV6	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)





Solution Diagram:

