

# DIREKTRONIK



## Product Overview

Layer 3 10GE Uplink Managed PoE Switch with 8\*10M/100M/1000M/2.5Gbps adaptive RJ45 ports, 2\*10Gbps SFP+ fiber module expansion slots and 1\*Console port. 1-8 RJ45 ports support IEEE802.3af/at standard, single port maximum output 30W. Support static routing function, provide complete security policy, perfect QoS policy and rich VLAN function, easy to manage and maintain, meet the requirements of Enterprise, Community, Internet Cafe, Hotel, Office Network and Campus Network Networking and WIFI coverage.

## Product Features

- Support IEEE 802.3af/at standard;
- Automatic detection and identification of standard PoE powered devices, intelligent power supply to prevent burning of non-standard PoE powered devices or common devices;
- Support port power priority to ensure continuous power supply to critical nodes of the network;
- Panel lights monitor operating status and assist in failure analysis;
- Supports IEEE802.3x full-duplex flow control and Backpressure half-duplex flow control;
- 10Gb optical port adaptive 1000M/5G/10Gbps standard optical module, support SR/LR/LRM/ER/ZR and other models;
- Layer 3 routing protocol control, adapted to multiple services, efficient and secure information transmission;
- Supports dual IPV4 and IPV6 protocol stacks
- Static routes and dynamic routing protocols such as RIP, OSPF, and BGP are supported
- Support static convergence and dynamic convergence (LACP) 2 convergence modes, effectively increase the link bandwidth, improve the reliability of the link, and at the same time can achieve load balancing, link backup;
- Flexible and convenient management and maintenance support Console, Telnet, SSH and other management methods;
- Support WEB way management, more simple and efficient, easy to install and debug engineering and maintenance personnel;
- Support HTTP/TFTP/FTP file upload and download management.

# Product Specifications

## Hardware Specifications

<b>Model</b>	PM3010TSM V1
<b>Interface</b>	8*10M/100M/1000M/2.5Gbps RJ45 Ports 2*1000M/2.5G/10Gbps SFP+ Slots 1 Console Port
<b>Standard</b>	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x,IEEE802.3ad,IEEE802.3bz, IEEE802.3ae,IEEE802.1x, IEEE802.1q, IEEE802.1p, IEEE802.1d,IEEE802.1w,IEEE802.3af, IEEE802.3at
<b>Network Media</b>	10BASE-T: UTP category 3,4,5 cable(≤100m) 100BASE-TX: UTP category 5, 5e cable(≤100m) 1000BASE-TX: UTP category 5e, 6 cable(≤100m) 2.5GBASE-TX: UTP category 6, 6A cable(≤100m) 1000BASE-X: MMF, SMF 10GBASE-X: MMF, SMF 10GBASE-SR: OM1/OM2/OM3 or above MMF (2m~300m) 10GBASE-LR: IEC's B1.1 and B1.3 SMF (2m~10000m)
<b>Indicator</b>	PWR (Green), LNK/ACT (Green/Orange), SYS (Green), PoE (Orange)
<b>MAC Address Table</b>	16K, Auto-learning, Auto-updating
<b>Jumbo Frame</b>	12KByte
<b>Packet Buffer</b>	12Mbit
<b>Transfer Mode</b>	Store-and-forward
<b>Packet Forward Speed</b>	59.52Mpps
<b>Switching Capacity</b>	80Gbps
<b>PoE Port</b>	Port1~8
<b>PoE Power On RJ45</b>	1/2(-),3/6(+)
<b>PoE Power Output</b>	30W(Max)
<b>PoE Power Budget</b>	150W
<b>Power Supply</b>	180W Built-in power supply
<b>Input Power Supply</b>	AC: 100~240V, 50/60Hz, 2.5A Max
<b>Dimensions(L*W*H)</b>	330*230*44mm, Black
<b>Operating Temperature</b>	0°C ~ 40°C
<b>Storage Temperature</b>	-40°C ~ 70°C
<b>Operating Humidity</b>	10% ~ 90% non-condensing
<b>Storage Humidity</b>	5% ~ 90% non-condensing
<b>Surge Protection</b>	Differential mode ±2KV,Common mode ±4KV
<b>Electrostatic Standard</b>	Contact ±6KV, Air ±8KV
<b>MTBF</b>	>100000 hours

## Software Specification

<b>L3 Features</b>	<b>DHCP Server</b>	DHCP Server
		DHCPv6 Server
	<b>Route</b>	Static Route(IPV4/IPV6)
		Route Aggregation
	<b>RIP</b>	RIP v1/v2
	<b>OSPF</b>	OSPF v2
	<b>BGP</b>	BGP4
<b>L2 Features</b>	<b>MAC Address Table</b>	MAC Aging Time
		MAC Filter
		MAC Notification
	<b>Basic Management</b>	Console/Telnet/SSH
		Http/Https、 SSL/TLS
		FTP/TFTP
		Syslog
		SNMP(v1/v2c/v3),SNMP Trap
		SNTP/NTP
		CPU protect
		Software/Hardware watchdog
		Firmware Upgrade/Backup
		Ping/Traceroute
	<b>Port Config</b>	Bandwidth Control
		Flow Control
		EEE
		MTU
		CFM(802.1ag)
		EFM OAM(802.3ah)
		DDM
		Storm Control
		Port Isolation
		Port Security
		Virtual Cable Test
		ULDP/Cisco UDLD
	<b>Discovery</b>	LLDP(802.1ab)
		LLDP-MED
	<b>(Link Aggregation)</b>	Static
		LACP(802.3ad)
		Load Balance(src-mac/dst-mac/src-ip/dst-ip)
		Max groups and ports per group
	<b>VLAN</b>	VLAN(802.1Q 4K)
		Access/Trunk/Hybrid
		Private VLAN
		VLAN Filter
		MAC-based VLAN
		Protocol-based VLAN
		IP Subnet-based VLAN
		Voice VLAN
GVRP/GMRP		
QinQ/Selective-QinQ/Flexible QinQ		
VLAN Translation/N:1 VLAN Translation		
Guest VLAN		
<b>Network Loop Detection</b>	Loopback Detection	
	ERPS	
<b>Spanning Tree</b>	STP/RSTP/MSTP	
	MSTP Support 64 instance	
	BPDU Guard/Root Guard/BPDU Tunnel	
<b>ARP</b>	Static ARP	

		ARP Scanning Prevention
		ARP Spoofing Prevention
		ARP Guard
		Gratuitous ARP
		Dynamic ARP Inspection
		ARP Quantity Control
IPv4 Related Function	ICMP	Anti ICMP Attack
		ICMP Rate Limit
		ICMP Unreachable Drop
	IP Forward	Static Route
		Route Aggregation
	Control Multicast	DCSCM
	Multicast VALN	Multicast VALN
	IGMP	IGMP SNOOPING V1/V2/V3
		Fast Leave
		IGMP Proxy
	DHCP	DHCP Server
		DHCP Client/BOOTP
DHCP Relay		
DHCP Snooping		
DHCP Option 82/43/60/61/67		
IPv6 Related Function	DHCPv6	DHCPv6 Server
		DHCPv6 Relay
		DHCPv6 Snooping
		IPv6 SAVI
		Security RA
	IPv6 Unicast Routing	Static Route
	IPv6 Multicast Routing	MLD v1/V2 Snooping
	IPv6 Features	SNMP over IPv6 Support
		HTTP over IPv6 Support
		SSH over IPv6 Support
		DNS over IPv6 Support
		IPv6 ping/traceroute Support
		IPv6 Telnet Support
		IPv6 Radius+ Support
		IPv6 Tacacs+ Support
		IPv6 SNTP/NTP Support
		IPv6 FTP/TFTP Support
		IPv6 IPsec Support
		IPv6 ACL
QoS(Quality Of Service)	Basic	Trust COS/DSCP
		Trust Port
	Scheduling	SP
		WRR
		WDRR
	PolicyMap Stream	Based on VLAN
		Based on COS/DSCP
		Aggregate PolicyMap
		Ingress PolicyMap
	Policing	CAR Stream Shaping(leak algorithm)
		Ingress Policing
	Rewrite	COS/802.1p Priority
		IP Precedence
IPv4 DSCP/IPv6 DSCP		
drop-precedence		
internal-priority		

		Ingress/Egress Rewrite
	<b>Queuing</b>	DSCP to DSCP mapping
		DSCP to DP mapping
		DSCP to Queue mapping
		COS to DP mapping
		COS to Queue mapping
<b>ACL</b>	<b>IP-ACL</b>	SIP/DIP
		IP Protocol
		IP Priority(DSCP,TOS, Precedence)
		TCP,UDP src,dst Port
	<b>MAC-ACL</b>	SRC/DST MAC
		VLAN
		COS
		Tag/Untag
	<b>IP-MAC ACL</b>	MAC-ACL and IP-ACL
	<b>User-defined ACL</b>	Base on user defined profile
	<b>ACL Features</b>	Based on time period ACL
ACL on VLAN		
Based on ACL Stream		
<b>Security</b>	<b>802.1x</b>	Port Based Authentication
		Support EAPoR
		MAC based Authentication
		Guest VLAN
	<b>MAB</b>	Based on Port Authentication
		Based on MAC Authentication
	<b>MAC Address Count Limit</b>	Based on Port
		Based on VLAN
	<b>IP Address Count Limit</b>	Based on Port
		Based on VLAN
	<b>Access Management</b>	Based on source mac and IP address
	<b>Deny DoS Attack</b>	TCP Flag
		TCP Fragment
		IP Segment
		ICMP
	<b>TACACS+</b>	Standard Support
<b>Radius</b>	Standard Support	
	Client, Support MD5	
<b>SSL</b>	Openssl 1.1.0	
<b>Redundancy Related Function</b>	<b>MRPP</b>	Compatiable ERRP
	<b>ULPP</b>	Uplink Protection Protocol
		Smart Link/Monitor Link
<b>ULSM</b>	Uplink State Monitor	
<b>Mirror</b>	<b>Mirror</b>	Support one to one, multi to one
		Port based mirror, support ingress, egress, and both
		CPU based mirror
		Flow based mirror
		RSPAN
<b>PoE</b>	<b>PoE Management</b>	ON/OFF Config
		Alive Checking for PD
		7/24 On/Off Scheduling

## Ordering Information

<b>Model</b>	20117620
<b>Product Information</b>	8-Port*2.5G(PoE) +2*10G SFP+ Managed PoE Switch
<b>Packaging Accessories</b>	<ul style="list-style-type: none"><li>● AC power cord *1</li><li>● Feet *4</li><li>● Rack Mount Kit *2</li><li>● Screw *8</li><li>● User Manual *1</li></ul>