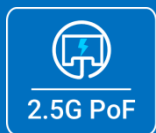




24-Port 2.5G Managed PoF Switch with 2×10G SFP+ Uplink



POF7500-24PXF2TF-L3M

Key Features:

Ports: 24 × 2.5G PoF (data + power over hybrid fiber), 2 × 10G SFP+ (supports 10GBASE-SR/LR)

Power per Port: Up to 30W (IEEE 802.3af/at compliant)

Max Total PoF Budget: 500W

Max Distance: 500 meters (with certified YD/T 4305.1-2023 hybrid optical cable)

Standards Compliance: IEEE 802.3, 802.3af/at, 802.1Q/VLAN, 802.1X, 802.1p, YD/T 4305.1-2023

L3 Routing: RIP v1/v2, Static Routing, Proxy ARP, DHCP Server/Relay/Snooping

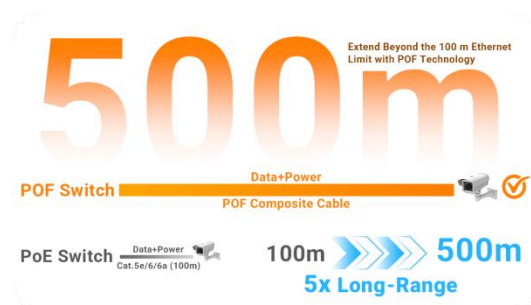
Security: 4-element binding, ACL, DoS Protection, HTTPS/SSHv2, SNMPv3

Management: Web GUI, CLI (Console/Telnet), SNMP v1/v2c/v3, RMON, Syslog, LLDP

Physical: 1U rack-mountable, AC 100–240V AC inputs, operating temp: 20°C–55°C

Cost-Effective 500m PoF: Full Power+Data at 2.5G Speed

Delivers 2.5G data + up to 30W DC power over one SC-type hybrid cable, compliant with YD/T 4305.1-2023. Ideal for K–12 schools, clinics, or municipalities deploying standard 4K IP cameras, VoIP phones, or 2.5G Wi-Fi 6/6E APs. Benefit: Achieve 500m powered connectivity at lower TCO — perfect for large-scale rollouts across 100+ sites.

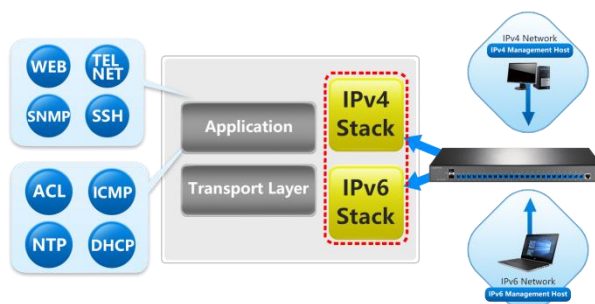


Full Layer 2 and Layer 3 Routing Intelligence

Supports comprehensive switching and routing capabilities across both OSI layers: Layer 2: IEEE 802.1Q VLAN, Private VLAN, GVRP, STP/RSTP/MSTP, LACP link aggregation, IGMP/MLD Snooping, and QoS (802.1p/DSCP). Layer 3: Static routing, RIP v1/v2, proxy ARP, DHCP server/relay/snooping, and policy-based routing (PBR). Enables seamless traffic segmentation, inter-subnet communication, loop-free topologies, and intelligent forwarding — all from a single device.

IPv6/IPv4 Dual Stack Management

The POF7500-24PXF2TF-L3M supports both IPv6 and IPv4 protocols, enabling seamless dual-stack operation. SMBs can transition to IPv6 without replacing existing infrastructure, minimizing upgrade costs. Ideal for IPv6 FTTx edge deployments, the switch allows future-proof network evolution while maintaining full compatibility with current IPv4 services and management.



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Technical Datasheet

Model	POF7500-24PXF2TF-L3M
Hardware Specifications	
Connector	24* 2.5G optoelectronic composite PoF ports 2* 10G SFP+ Slots
Managed	1* Console port
PoF Port	24* SC-type hybrid
Reset Button	< 10 sec: System reboot > 10 sec: Factory default
LED indicators	Power Indicator: PWR(green). System Indicator: SYS(green). Network Indicator: Link1-26(green) PoF Working Indicator: PoF 1-24 (green)
Power Connector	AC Power cord with C13 connector (localized to region of sale)
Power Requirements	100~240V AC, 50/60Hz
Power Consumption	Max. 18 watts (system on) Max. 520 watts (Full loading)
ESD Protection	Contact Discharge 6KV DC, Air Discharge 8KV DC
Enclosure	Metal case
Thermal Fan	Two Fan
Installation	1U 19in Rack-mount
Dimension(W×D×H)	440mm x 290mm x 45mm
Weight	< 4.5Kg
Switching Specifications	
Network standard	IEEE802.3i 10 BASE-T IEEE802.3u 100 BASE-TX IEEE802.3ab 1000BASE-T IEEE802.3z 1000BASE-X IEEE 802.3bz 2.5G BASE-X IEEE 802.3ae 10G BASE-X IEEE802.3x Flow Control IEEE 802.3az Energy Efficient Ethernet (EEE)
Switch Architecture	Store and Forward
Backplane bandwidth	320Gbps
Packet forwarding rate	238.08Mpps
MAC address	16k
Shared Data Buffer	32 megabits
Jumbo Frame	12 Kbytes
Flow Control	IEEE802.3X full-duplex and Backpressure half-duplex

Power over Fiber (PoF) Specifications

PoF Power Output Per port 54V DC, max. 30 watts

PoF Distance Max. 500 meter

Max. 25W → 100 meter

POF Load Table Max. 20W → 300 meter

Max. 15W → 500 meter

PoF Power Budget Max. 500W

Layer 2~ Layer 3 Functions

Routing IPv4/IPv6 static routing, RIP, OSPF

Vlan
802.1Q tagged VLAN
802.1ad Q-in-Q tunneling (VLAN stacking)
Voice VLAN
Protocol VLAN
Management VLAN
Up to 256 VLAN groups, out of 4094 VLAN IDs

Link Aggregation IEEE 802.3ad LACP and static trunk

Spanning Tree Protocol
IEEE 802.1D Spanning Tree Protocol (STP)
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
STP BPDU Guard, BPDU Filtering and BPDU Forwarding

IGMP
IPv4 IGMP snooping v2, v3
IGMP querier
Up to 256 multicast groups

MLD Snooping IPv6 MLD snooping v2, v3, up to 256 multicast groups

PoF Management
Open or close port
Standard POF scheduling management Power and current display
Automatic restarting function of equipment dead machine Timing

QoS
8 mapping IDs to 8 level priority queues
Port number
802.1p priority
DSCP/IP precedence of IPv4/IPv6 packets
Traffic classification based, strict priority and WRR
Ingress/Egress Rate Limit per port bandwidth control

DHCP
DHCP Server
DHCP Relay
DHCP Client
DHCP Snooping

Security Functions

Access Control List
IPv4/IPv6 IP-based ACL/MAC-based ACL
Max. 256 ACL entries

Port Security
IEEE 802.1X – Port-based authentication
Built-in RADIUS client to co-operate with RADIUS server
RADIUS/TACACS+ user access authentication

MAC Security
IP-MAC port binding, MAC filter
Static MAC address, max. 256 static MAC entries

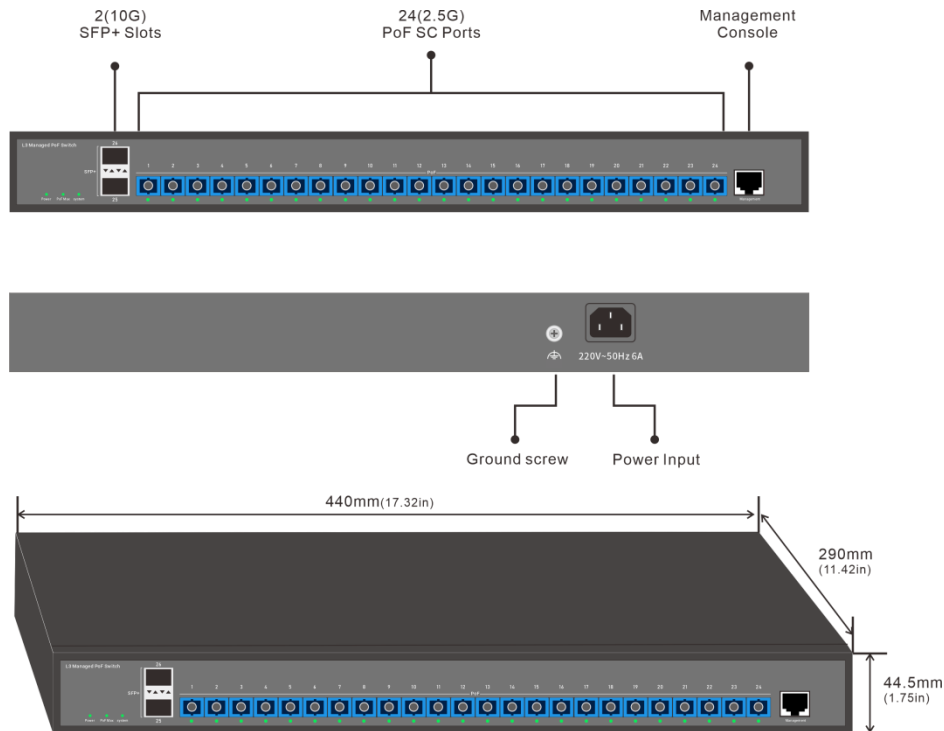
Enhanced Security DHCP Snooping and DHCP Option82

	STP BPDU guard, BPDU filtering and BPDU forwarding DoS attack prevention ARP inspection IP source guard
Management Function	
Basic Management Interfaces	RS232 to RJ45 Console, Web browser, Telnet, SNMP v1, v2c
Secure Management Interfaces	SSHv2, TLS v1.2, SNMP v3
System Management	Firmware upgrade by HTTP/TFTP protocol through Ethernet network Configuration upload/download through HTTP/TFTP LLDP protocol
Event Management	Remote/Local Syslog, System log
SNMP MIBs	RFC 1213 MIB-II RFC 1215 Generic Traps RFC 1493 Bridge MIB RFC 2674 Bridge MIB Extensions RFC 2737 Entity MIB (Version 2) RFC 2819 RMON (1, 2, 3, 9) RFC 2863 Interface Group MIB RFC 3635 Ethernet-like MIB RFC 3621 Power Ethernet MIB
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, EN 55032, EN 55035, ICES-003 issue 7, CE
Standards Compliance	IEEE 802.3ad Port Trunk with LACP IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1p Class of Service IEEE 802.1Q VLAN Tagging IEEE 802.1x Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3az for Energy-Efficient Ethernet RFC 768 UDP, RFC 783 TFTP, RFC 791 IP, RFC 792 ICMP, RFC 2068 HTTP RFC 1112 IGMP v1, RFC 2236 IGMP v2, RFC 3376 IGMP v3 RFC 2710 MLD v1, RFC 3810 MLD v2
Standards Conformance	
Environment specification	Operating temperature: -20℃~55℃, operating humidity: 5%~95% Storage temperature: -30℃~75℃, storage humidity: 5%~95%

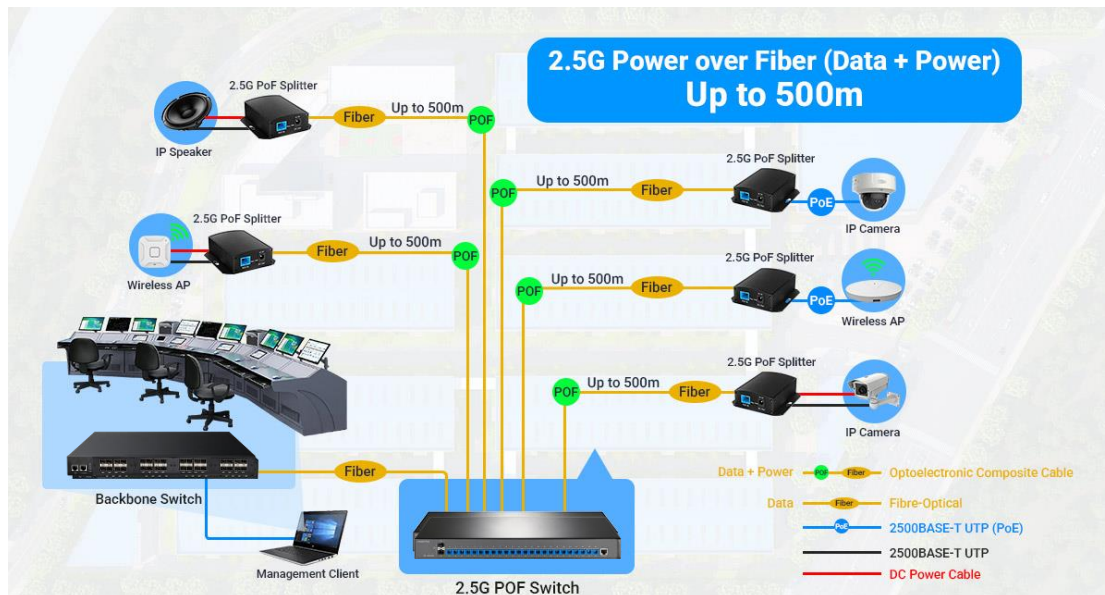
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Mechanical Drawing



Applications



Ordering Information

POF7500-24PXF2TF-L3M

24-Port 2.5G Managed PoF Switch with 2-10G SFP+ Uplink, Power budget 500W

Shenzhen Benchu Group Technology Limited

5F,Block5,GuangmingGu Industrial Park,Matian Villiage,
Guangming Disitrrict,Shenzhen,China

Tel: +86-755 23246531 Email: sales@benchu-group.com

www.benchu-group.com



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