28-PORT 10G UPLINK L3 MANAGED ETHERNET FIBER SWITCH

BP-SWM24G4F01

DESCRIPTION

The BP-SWM24G4F01 is a 10G uplink L3 managed Ethernet fiber switch. It has 24*10/100/1000Base-T RJ45 ports and 4*1/10G SFP+ fiber ports. Each port can support wire-speed forwarding.

The BP-SWM24G4F01 has L3 network management function, support IPV4/IPV6 management, dynamic routing and forwarding, complete security protection mechanism, complete ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS(<20ms) to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important Uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as port traffic control, VLAN division, and SNMP through the Web network management mode. It satisfies high-density network application environment and is suitable for medium, large-scale scenes such as hotel, campus, park, shopping mall, scenic spot, hospital, bank to form an economical, efficient and reliable communication network.

FEATURES

- **Full Gigabit access, 10G SFP+ fiber port uplink**
- Supports Gigabit Ethernet port and 10G SFP+ fiber slot port combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.

- **Strong business processing capability**
- IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN and QinQ configuration.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including Equ, SP, WRR & SP+WRR.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- IGMP V1/V2 and IGMP Snooping.
- ERPS/STP/RSTP/MSTP.
- Static and dynamic aggregation.

- **Security**
- 802.1X authentication.
- Port isolation, Storm control.
- IP-MAC-VLAN-Port binding.

- **Stable and reliable**
- Low power consumption, galvanized steel casing. The fan active cooling.
- Self-developed power supply, high redundancy design, providing a long term and stable power output.
- CCC, CE, FCC, RoHS.
- The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A.

- **Easy operation and maintenance management**
- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).
- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.

TECHNICAL SPECIFICATION

Model: BP-SWM24G4F01	
Interface Characteristics	
Fixed port	24*10/100/1000Base-T RJ45 ports (Data) 4*1/10G SFP+ ports (Data) 1*Console RS232 port (115200, N,8,1)
Ethernet port	Port 1-24 support 10/100/1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption
Twisted pair transmission	10BASE-T: Cat3,4,5 UTP (≤100 meter) 100BASE-TX: Cat5 or later UTP (≤100 meter) 1000BASE-T: Cat5e or later UTP (≤100 meter)
Optical Fiber Port	1/10G SFP+ optical fiber port, default no includes optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Fiber Port Expansion	Support Turbo overclocking 2.5G optical module expansion and ring network
Optical Cable/ Distance	Multi-mode: 850nm / 0~500M (1.25G), 0~300M (10G), Single-mode: 1310nm / 0~ 40KM, 1550nm / 0~120KM
Chip Parameter	
Network management type	L3
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3ae 10GBase-SR/LR, IEEE802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	598Gbps
Forwarding Rate@64byte	95.23Mpps
CPU	500MHz
DRAM	2G
FLASH	128M
MAC	32K
Buffer Memory	32M
Jumbo Frame	9.6K
LED Indicator	Power: PWR (Yellow), System: SYS(Yellow), Network: Link (Yellow), fiber port: L/A (Green)
Reset Switch	Yes, press and hold the switch for 10 seconds and release it to restore the factory settings
Power Supply	
Total PWR / Input Voltage	60W / (AC100-240V)
Power Consumption	Standby <25W, Full Load <35W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 1.0A
Physical Parameter	
Operation TEMP / Humidity	-20^{0}C ~ +55°C; 5% ~ 90%, RH Non condensing
Storage TEMP / Humidity	-40^{0}C ~ +75°C; 5% ~ 95%, RH Non condensing
Dimension (L*W*H)	440*290*44.5mm
Net /Gross Weight	<3.5kg / <4.0kg
Installation	Desktop, Wall-mounted, 19-inch 1U cabinet installation
Certification & Warranty	

| Lightning protection / protection level	Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN60950, FCC Part 15 Class B, RoHS
Network Management Features	
Interface	IEEE802.3X (Full-duplex) Port temperature protection setting No connection port automatic sleep Port green Ethernet Energy-saving setting Broadcast storm control based on port speed SFP+ optical port DDMI real-time digital diagnosis The speed limit of the message flow in the access port, minimum particle size is 64Kbps.
Layer 3 Features	IPV4 Equal Cost Routing NG protocol, maximum 1000 entries ARP protocol, maximum 1000 entries Pingv6, Telnetv6, TFTPv6, DNSv6, ICMPv6 IPV4/IPV6 VRRP, the maximum group is 255 IPV4/IPV6 VLANIF interface supports up to 128 IPV4/IPV6 static route/default route supports up to 128 entries L3 network management function, IPV4/IPV6 dual-stack management IPV4 dynamic routing, RIPv1/v2, OSPFv2, BGP4+, 4000 routing entries IPV6 dynamic routing OSPFv3, BGP+, RIPng, IPV6 management, 1000 routing entries Layer 3 routing and forwarding, support communication between different network segments and different VLANs
VLAN	Voice VLAN, QinQ configuration 4K VLAN based on port, IEEE802.1q Port configuration of Access, Trunk, Hybrid. VLAN based on MAC, VLAN based on the protocol
Port Aggregation	LACP, Static aggregation Max 14 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Industrial Ring Network Protocol	G.8032 (ERPS), Recovery time less than 20ms 250 Ring at most, Max 250 devices per ring.
Multicast	MLD Snooping v1/v2, Multicast VLAN IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS, Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)
ACL	Port-based Issuing ACL, ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	IP-MAC-VLAN-Port binding ARP inspection,Anti-DoS attack AAA & RADIUS, MAC learning limit Mac black holes,IP source protection IEEE802.1X & MAC address authentication Broadcast storm control,Backup for host datum SSH 2.0,SSL,Port isolation,ARP message speed limit User hierarchical management and password protection
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay

Management	CPU instant utilization status view Console/AUX Modem/Telnet/SSH2.0 CLI One-key recovery, Cable Diagnose, LLDP Web Management (HTTPS), NTP, System work log, Ping Test ONV NMS- Smart Network Management System Platform (LLDP+SNMP) Download & Management on FTP, TFTP, Xmodem, SFTP, SNMP V1/V2C/V3
System	Category 5 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network

DIMENSION

290mm

44.5mm

440mm

A   B   C   D

E
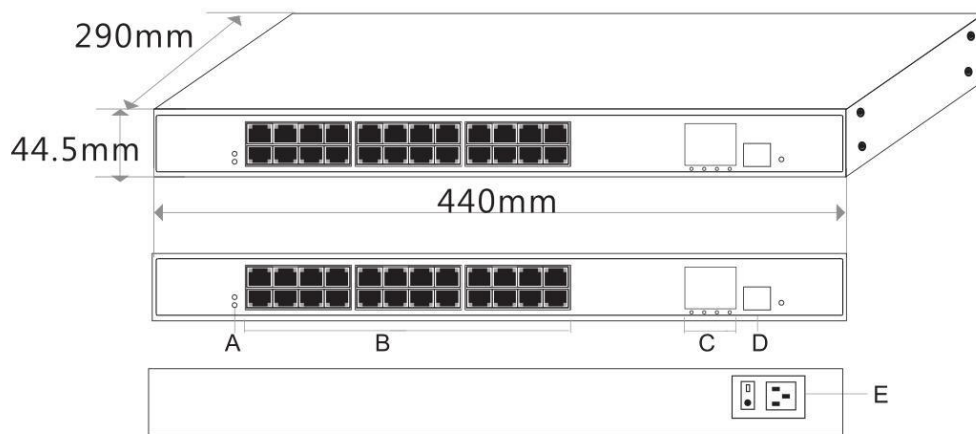
A. Working indicator

B. 24* 10/100/1000M RJ45 ports

C. 4*1/10G SFP+ ports

D. Console port

E. Power input port AC100-240V,50/ 60Hz

BLAUPUNKT

Product Datasheet

BLAUPUNKT
Brand
established
1924
GERMANY

APPLICATION
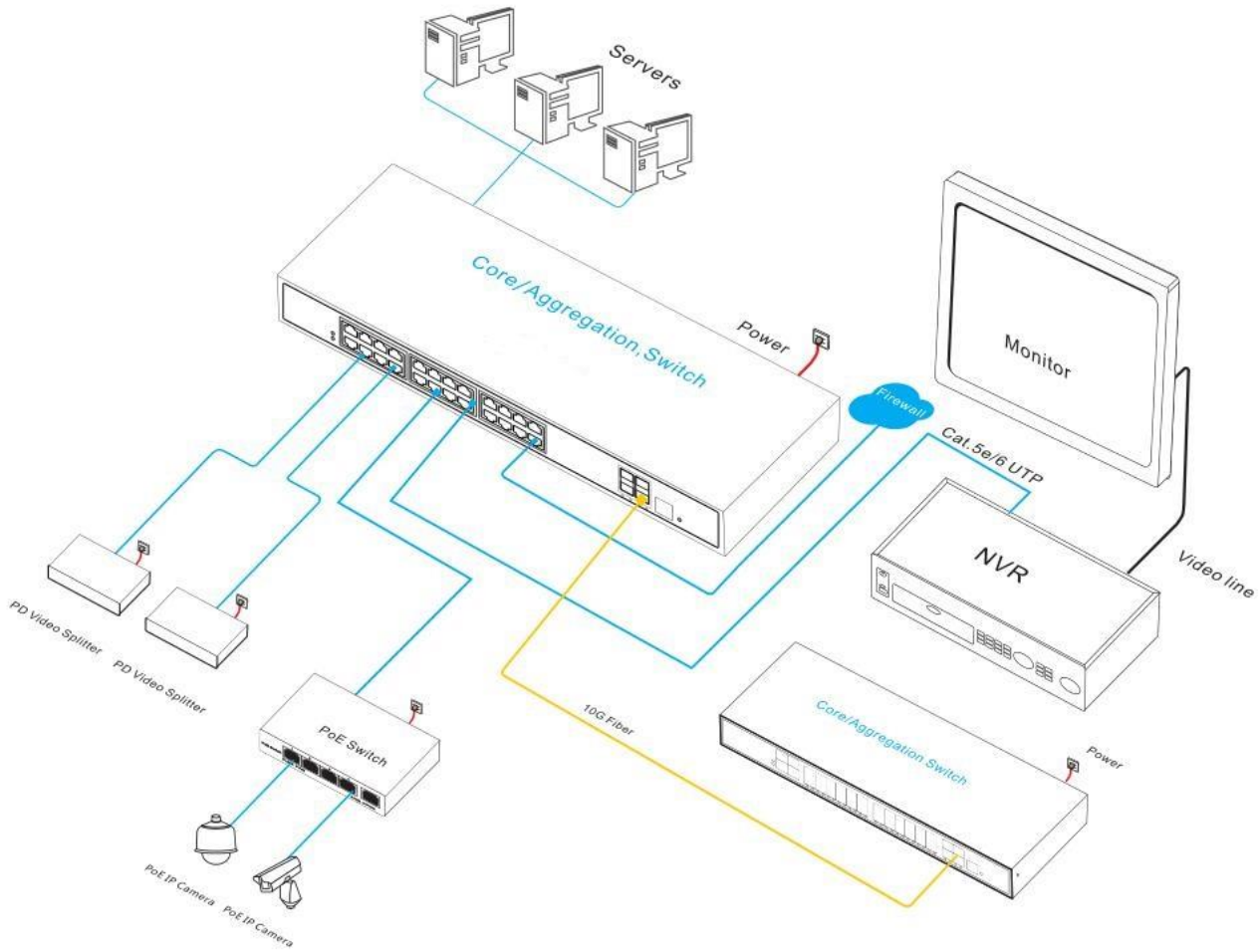
DESCRIPTION	
BP-SWP-24GP2GF-250	L3 managed Ethernet aggregation /core fiber switch with 24*10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber ports. Support 1U/19 inch rack installation.

Enjoy it.