Vikings Technology

SMG840 BP series

Managed L2+ Industrial Fiber Bypass Switch

KEY FEATURES

- 8*10/100/1000Base-TX RJ45 and 4*1/2.5GBase-X SFP ports with 1*single LC fiber Bypass channel
- Fiber Bypass ensures network continuity during power loss with recovery time ≤10 ms
- Industrial Hardened grade, designed to operate in harsh environmental conditions
- Extended PoE and Ethernet transmission up to 250 meters
- Up to 90W per port PoE++ support, IEEE 802.3af/at/bt compatible
- Smart PoE management - PoE watchdog
- ERPS support with recovery time <50ms
- Electric up to 6KV surge protection
- USB port for configuration and upgrading
- Support Digital Input, Relay Output and RS485 data
- Operating temperature from -40°C to +75°C
- Redundant and wide power input range with input polarity protection
- Aluminum case, no fan design
- DIN-Rail or Wallmount
- 5 years warranty

INTRODUCTION

The SMG840 BP series Industrial grade fiber Bypass Layer 2+ Managed Ethernet Switch comes with 8 * 10/100/1000Mbps RJ45 and 4 * 1/2.5GBase-X SFP ports with 1 * single LC (WDM) fiber Bypass channel. Under normal conditions, the device operates as a typical Layer 2+ Managed Ethernet Switch. However in the event of a power failure or internal fault, the integrated optical bypass module is activated, allowing network traffic to continue flowing directly between connected devices without interruption, as if the switch were not present in the path. This ensures seamless continuity in mission critical networks where absolute reliability is essential, making this switch an ideal solution for industrial, telecom, and security environments.

The PoE version of this switch provides PoE as Power Sourcing Equipment (PSE) up to 90W per port, being IEEE 802.3af/at/bt compatible. Smart PoE management allows user to remotely reboot ports and enable PoE watchdog - auto reboot of not responding PoE devices. With in-built Ethernet extender function, signals on copper port can be transmitted & received up to 250meters from remote device, at the same time supplying PoE power.

SPECIFICATIONS

Model	SMG840-D3-BP	SMG840P-D3-BP
Ports		
RJ45 ports and speed	8 * 10/100/1000Base-TX	
Fiber ports and speed	4 * 1/2.5GBase-X SFP 1 * Single LC (WDM) Bypass channel	
Management ports	1 * RJ45 Console	
I/O ports	n/a	

Model	SMG840-D3-BP	SMG840P-D3-BP
Ethernet		
Switching Bandwidth	36Gbps	
Packet Forwarding	53.5Mpps	
Max Packet Length	10KB	
Packet Buffer	12Mb	
MAC Address Table	16K	
PoE	Not supported	Ports 1-2: IEEE 802.3af/at/bt, up to 90W per port Ports 3-8: IEEE 802.3af/at, up to 30W per port 240W Total
Supported Standards	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z IEEE802.3x, IEEE 802.1D, IEEE 802.1w, IEEE802.1Q IEEE802.1X, IEEE 802.1ab, IEEE 802.3ad, ITU-T G.8032	
L2 Management		
Port Features	Static & Dynamic aggregation, 1G/2.5G aggregation IEEE802.3x flow control, Traffic statistics, Port isolation Network storm suppression based on port bandwidth Many to one port mirroring	
VLAN	Supports Access, Trunk and Hybrid modes	
VLAN Classification	Mac Based, IP Based, Protocol Based	
QinQ	Port-based, VLAN-based, Flow-based	
DHCP	Support DHCP client & DHCP snooping	
ACL	IP Standard, MAC extend, IP extend	
Redundancy protocols	STP, RSTP, ITU-T G.8032 ERPS, MSTP	
Multicast	IGMP snooping V1/V2/V3	
QoS	Supports QoS Class, Remarking, SP WRR queue scheduling Policy-based QoS Ingress/Egress port based rate limit	
Security	Supports 802.1x, Port authentication, MAC authentication, RADIUS service Supports Port-security, IP Source Guard, IP/Port/MAC binding ARP-check and ARP packet filtering for illegal users	
Management & Maintenance	Web based management, SNMP V1/V2C/V3, Telnet/SSH server LLDP, RMON alarm, NTP, Ping, Tracert, TFTP client, IPv6 PoE Management	
L3 Management		
ARP	ARP table aging	
IPv4/IPv6	Static routing	
DHCP	DHCP server	

Model	SMG840-D3-BP	SMG840P-D3-BP
Environmental		
Operating Temperature	-40°C ~ +75°C	
Storage Temperature	-40°C ~ +85°C	
Relative Humidity	5 ~ 90% non-condensing	
MTBF	590.000h	
Electrical and Physical		
Redundant Power Inputs	24-58VDC	44-57VDC
Max Power consumption	15W	255W
Input polarity protection	Yes	
Case	IP40 aluminum case	
Cooling	Natural cooling, no fan design	
Dimensions (H * D * W)	158 * 115 * 54mm	
Weight	~1.4kg	
Mounting	Din-rail / Wallmount	
Certifications		
Standards	Surge protection for power ports: 6KV/4KV (EN 61000-4-5) Surge protection for Ethernet ports: 6KV/2KV (EN 61000-4-5) Vibration: IEC 60068-2-6:2007 Shock: IEC 60068-2-27:2008 Free fall: IEC 60068-2-32:1975 CE 2014/30/EU EMC, EN 55032:2015/A11:2020, EN 55035:2017/A11:2020 EN 61000-3-2:2019/A2:2024, EN 61000-3-3:2013/A2:2021/AC:2022-01 EN 61000-4-2:2009, EN 61000-4-3:2020, EN 61000-4-4:2012 EN 61000-4-5:2014/A1:2017, EN 61000-4-6:2023 CE 2014/35/EU LVD, EN IEC 62368-1:2024 FCC Part 15, Subpart B:2016, ANSI C63.4:2014 RoHS 2011/65/EU, (EU) 2015/863, (EU) 2017/2102	

ORDERING INFORMATION

Model name	Description
SMG840-D3-BP	Managed L2+ Industrial Fiber Bypass Switch 8*10/100/1000Base-TX RJ45 and 4*1/2.5GBase-X SFP ports, 1*single LC fiber Bypass channel, redundant 24-58VDC inputs, Din-Rail
SMG840P-D3-BP	Managed L2+ Industrial Fiber Bypass Switch 8*10/100/1000Base-TX RJ45 PoE++ and 4*1/2.5GBase-X SFP ports, 1*single LC fiber Bypass channel, redundant 44-57VDC inputs, Din-Rail

OTHER

SFP modules and Power supplies are not included and to be purchased separately