



ALLNET

ALL-SG8428PM

24 port gigabit copper PoE + 4x SFP smart-managed

- 24 Port gigabit non-blocking switch architecture
- supports NWay protocol (10/100/1000Mbps) and duplex mode (half/full) auto detection
- supports back-pressure (half duplex), flow control (IEEE 802.3x and IEEE 802.3az Energy Efficient Ethernet)
- VLAN: port based / tagged based
- Link aggregation (IEEE802.3ad LACP)
- IGMP snooping (v1/v2/v3)
- QoS (port based, Flow, 802.1p, IP-TOS, IP DSCP)
- Stormcontrol (broadcast, multicast, unicast)
- 390W PoE budget supports PoE IEEE802.3af/at PSE-Devices
- 2x internal fans, which can be exchanged via Hot-Swap

Part No.: 139327

Note: Product specification is subject to change without notice.

www.allnet.de



The new ALLNET ALL-SG8428PM switch is the perfect product for the SMB market with a high network and data volume and enables a fast data transmission within the network. With a total of 24 backwards compatible gigabit ports, the integrated servers and PCs will be connected in a reliable and powerful way. The ALL-SG8428PM can forward a maximum PoE power budget of 390W to the connected devices via the internal 450W power supply.

The 24 gigabit PoE ports support the PoE standards IEEE802.3af and IEEE802.3at. The switch provides two laterally installed fans, which can be exchanged if they are broken by just loosening the two screws - this opportunity is called hot-swap. The robust metal housing is suitable for a 19" installation as well as wall mounting.

Specifications

Element	Specification
Standards	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3ab 1000BASE-T IEEE802.3az EEE (Energy efficient Ethernet) IEEE 802.3af, Power Over Ethernet IEEE 802.3at, Power Over Ethernet Plus IEEE 802.3ad, Link Aggregation IEEE 802.3x, Ethernet flow control IEEE 802.1AB-2005, LLDP (Link Layer Discovery Protocol) IEEE 802.1d, Spanning Tree Protocol IEEE 802.1w, Rapid Spanning Tree Protocol IEEE 802.1q, VLAN IEEE 802.1p, QoS IEEE 802.1x
HW Features	Switch Capacity: 52Gbit/s bi-direction Forwarding Mode: Store and Forward MAC address table: 8K Packet buffer size: 1M bit Jumbo frame: 9K bytes
I/O Ports	24x GbE Ports, RJ45 4x GbE Combo Ports, RJ45 + SFP
PoE Ports	Port 1~ 24 IEEE802.3at, IEEE802.3af PoE power budget: 390W for 450W power supply
Link Aggregation	Max 8 aggregation groups, each support 8 ports Static aggregation and dynamic aggregation



Element	Spezifikation
VLAN	4K VLANs Port based VLANs Voice VLAN
Spanning Tree	STP (Spanning Tree Protocol) RSTP (Rapid Spanning Tree Protocol)
Port Mirroring	Many-to-one Port Mirroring
QoS	Rate limiting on packets sent and received by an interface Eight queues on each port WRR, SP, WRR+SP queue scheduling algorithms Re-marking of the 802.1p priority and DSCP priority Rate limiting in each queue and traffic shaping on ports
Power input	Internal power supply Input: 100-240V AC E-cap live time >3 years @ 40°C
LED Bedeutung	<p>SYS: Green LED Off: power off or fail On: power on Blinking: system booting up</p> <p>PoE Max. :Green LED Off: No over PoE max power budget (390W) On: Over PoE max power budget (390W)</p> <p>24 RJ45 Port LED: one bi-color LEDs on daughter board Link/ACT: Green/Amber Off: port disconnected or link fail Green on: 1000Mbps connected Amber on: 10/100Mbps connected Blinking: sending or receiving data</p> <p>PoE: Green LED Off: PoE power output off Green on: PoE power output on Blinking: PoE power output over >30W (No Powering)</p> <p>4 Combo port LED: RJ45: one bi-color LEDs on daughter board Off: disconnected or fail Green: 1000Mbps connected Amber: 10/100Mbps connected Blinking: data transmitting</p> <p>SFP: one LEDs on daughter board Off: disconnected or fail Green: 1000Mbps connected Blinking: data transmitting</p>



Element	Spezifikation																								
PoE Output power capacity	<p>Maximum output: 30W per each port Compliant with IEEE802.3af/at standard, following IEEE802.3a and IEEE802.3at Standard to support PoE or PoE+. Automatically discover the connection of PD device and immediately sends power to it. Auto disable port if the port current is over 700mA or short happens. Priority can be configured and default setting is lower port No. has high priority The maximum power used by power devices is defined by the following classification. When Port works in Auto Mode, the output port power limit will be associated with PD Classification Value.</p> <table border="1"> <thead> <tr> <th>Class</th> <th>Usage</th> <th>Minimum Power Levels Output at the PSE</th> <th>Maximum Power Levels at the Powered Device</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Default</td> <td>15,4W</td> <td>0,44 to 12,95W</td> </tr> <tr> <td>1</td> <td>Optional</td> <td>4,0W</td> <td>0,4 to 3,84W</td> </tr> <tr> <td>2</td> <td>Optional</td> <td>7,0W</td> <td>3,84 to 6,49W</td> </tr> <tr> <td>3</td> <td>Optional</td> <td>15,4W</td> <td>6,49 to 12,95W</td> </tr> <tr> <td>4</td> <td>Optional</td> <td>30W</td> <td>12,95 to 25,5W</td> </tr> </tbody> </table> <p>Follow the standard PSE pin-out standard of Alternative A (MDI-X) which is sending out power over number 1,2,3,6 pins of 8 wires of Ethernet CAT5 UTP cable.</p>	Class	Usage	Minimum Power Levels Output at the PSE	Maximum Power Levels at the Powered Device	0	Default	15,4W	0,44 to 12,95W	1	Optional	4,0W	0,4 to 3,84W	2	Optional	7,0W	3,84 to 6,49W	3	Optional	15,4W	6,49 to 12,95W	4	Optional	30W	12,95 to 25,5W
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PoE	<p>PoE scheduling PoE port priority Power limit per port PoE On/Off</p>																								
Power Adapter	450W power supply																								
Reset button	Support reset to default config																								
Network	<p>Support IPv6 System time (SNTP, manually, from computer)</p>																								
Traffic Management and QoS	<p>Port based VLAN IEEE 802.1Q VLAN tagging IEEE 802.3ad LACP Storm control IEEE 802.1p priority queues per port IEEE 802.1p queuing method (scheduler) Input priority mapping Rate limiting per port (ingress/egress) IEEE 802.3x flow control</p>																								



Element	Spezifikation
Class of Service (CoS)	IEEE 802.1p Class of Service (SPQ, WRR) Port based CoS IP TOS priority 802.1p VLAN information based CoS DSCP based CoS TCP/UDP based CoS
PoE Control	Port On/Off Port priority Power limiting (watt) per port Scheduling
Security	IEEE 802.1x Port security Port isolation IP filter DoS attack defense, ARP attack defense, and ICMP attack defense Loop prevention STP (IEEE 802.1d) User privilege management and password protection RADIUS TACACS+ AAA
Layer 2 Multicast	Layer 2 Multicast
Management and maintenance	SNMP v1/v2c SNMP trap event Remote configuration and maintenance using Telnet Web NMS System logs and alarms in different levels Supports HTTPS, TELNET, SSH
IPv6	IPv6 over Ethernet (RFC 2464) Dual-Stack (RFC 4213) ICMPv6 (RFC 4884) Neighbor discovery (RFC 4861) Auto configuration Static IPv6 address and prefix length Static IPv6 default gateway IPv6 duplicate address detection
Network management	LLDP (IEEE 802.1 ab) cable test ICMP echo/echo reply (Ping) Port mirror



Element	Spezifikation
System management	Firmware upgrade Configuration back up & restore
Safety	CE, LVD EN60950-1
EMC	FCC Part15 CE Class A
Dimension	441mm x 270mm x 45mm
FAN design	Fan*2 with Fan Tray „Hot-Swapable changeable“
Operation temperature	0 ~ 40°C Storage: -40 ~ 70°C
Operation humidity	10% ~ 90% RH (non-condensing) Storage: 5% ~ 90% RH (non-condensing)