

28 Port Layer 3 Lite Managed Gigabit Fibre Switch with 10Gb Uplinks

The Alloy AS5128-F Layer 3 Lite Managed Gigabit Fibre Optic Switch consists of 24x 100M/1000M SFP ports and 4 paired UTP gigabit ports and 4x dual speed 10G/1000M SFP+ ports. With a comprehensive range of the latest generation Layer 3 Lite, Layer 2+, QoS, Security and Management features, the AS5128-F fibre optic switch is an ideal solution for centralised fibre optic distribution.

All SFP ports support 100M and 1000M SFP modules and the SFP+ ports support 1000M and 10Gb SFP modules allowing easy upgrade paths for existing cabling and network infrastructure.

Multimode and single mode fibre optic SFP modules can be installed into the switch allowing for flexible fibre distribution across differentiating cable distances. UTP SFP modules can also be used in the 24 SFP ports to add additional copper ports where required.

The AS5128-P complies with the latest IEEE 802.3az Energy Efficient Green Ethernet standard to minimise power usage, with features such as Link Detection and Cable Length Detection. Link Detection automatically turns the power off/on to individual ports depending on link/idle traffic status. Cable Length Detection adjusts the signal strength based on the length of the cable - when using shorter cables the power consumption is reduced.

All of the Alloy AS Series switches feature Alloy's latest user friendly responsive Web GUI, allowing ease of configuration on all devices including PC, Tablet and Phones. Alloy have also included a bundle of unique features including a built in Device Management System (DMS), advanced PoE features and support for Alloy's Android and iOS Apps.



Key Features

- Managed Layer 2+ and Layer 3 Lite GbE Connectivity
- 24x 100M/1000M SFP Ports for flexible fibre optic installations
- 4x Paired 10/100/1000Mbps Copper UTP Ports
- 4x 10GbE SFP Ports for high speed desktop and backbone applications
- Built in Device Management System (DMS)
- High performance
- Enterprise-class security features
- IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet
- Dual AC and DC Power Supplies
- Limited Lifetime Warranty

Software Features

Layer 3 Lite Switching	
IPv4 Static Routes	IPv4 Unicast: Static routing
IPv6 Static Routes	IPv6 Unicast: Static routing
DHCP Server	Built in DHCP Server, allowing IP Address assignment to DHCP clients. Configurable DHCP Options.
Layer 2+ Switching	
Spanning Tree Protocol	Provides Redundat links and prevents network loops. Supports; <ul style="list-style-type: none"> Standard Spanning Tree 802.1d Rapid Spanning Tree (RSTP) 802.1w Multiple Spanning Tree (MSTP) 802.1s
Port Aggregation	Link Aggregation Control Protocol (LACP) IEEE 802.3ad <ul style="list-style-type: none"> Up to 26 groups Up to 4 ports per group
VLAN	Supports up to 4K VLANs simultaneously (4096 VLAN IDs) <ul style="list-style-type: none"> Port-based VLAN 802.1Q tag-based VLAN MAC-based VLAN Management VLAN Private VLAN Edge (PVE) Q-in-Q (double tag) VLAN Voice VLAN GARP VLAN Registration Protocol (GVRP)
IGMP	IGMP Snooping, Querier and Proxy support; Controls and manages the flooding of multicast packets in a layer 2 network, supports 1024 multicast groups
MLD	Version 1 and 2, Snooping for IPv6; Controls and manages the flooding of IPv6 multicast packets in a layer 2 network
Loop Protection	Alternative to STP, Prevents network loops
Device Management System	
Graphical Monitoring	Provides a graphical representation of your network displaying all devices that are connected. Three different layouts are available: Topology View - Logical diagram of your physical devices, includes information such as port numbers, devices connected, devices disconnected, allows access to device web management etc. Floor View - Allows you to upload floor plan of your building, allowing you to place devices in their physical positions. Map View - Google Maps type view, allowing you to place devices in their physical locations, perfect for IP Cameras that are installed schools, streets etc.
Device Management	Easy access to management of IP Phones, IP Cameras, Wireless Access Points and Switches via their built in web manager.
Traffic Monitoring	Visual display of traffic on your switch, per port analysis.
Troubleshooting	Network diagnostic between switch and connected device.
Find My Switch	Same functionality as the Find My Switch App. Allows you to click on a switch in your network, select find my switch and all LED's on the front panel of the switch will light allowing you to find your switch in racks that are full of devices and at most times difficult to locate.
Quality of Service (QoS)	
Hardware Queues	Supports 8 Hardware Queues
Scheduling	<ul style="list-style-type: none"> Strict Priority and weighted round-robin (WRR) Queue assignment based on DSCP and Class of Service (COS)
Classification	<ul style="list-style-type: none"> Port based 802.1p VLAN priority based IPv4/IPv6 precedence / DSCP based Differentiated Services (DiffServ) Classification and tag re-marking ACLs
Rate Limiting	<ul style="list-style-type: none"> Ingress policer Egress shaping and rate control

Security	
Secure Shell (SSH)	SSH secures Telnet traffic in or out of the switch, supports SSH v1 and v2
Secure Sockets Layer (SSL)	SSL encrypts http traffic, allows secure access to the web GUI
IEEE 802.1X	<ul style="list-style-type: none"> • IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions • Supports IGMP-RADIUS based 802.1X • Dynamic VLAN assignment
Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	Prevents illegal IP address from accessing specific ports on the switch
RADIUS / TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm
DHCP Snooping	Eliminates unauthorised DHCP Servers from offering IP Addresses to DHCP clients
ACLs	Supports up to 512 entries. Drop or rate limitation based on: <ul style="list-style-type: none"> • Source and destination MAC, VLAN ID or IP address, protocol, port, • Differentiated services code point (DSCP) / IP precedence • TCP/ UDP source and destination ports • 802.1p priority • Ethernet type • Internet Control Message Protocol (ICMP) packets • TCP flag
Management	
Web GUI	Built-in switch configuration utility for browser-based device configuration; IPv4 and IPv6 HTTP, HTTPS
CLI	Configure/manage switch in command line mode; Telnet, SSH, Console
Remote Monitoring (RMON)	Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
UPnP	Supports UPnP to enable device to device interoperability
s-Flow	Supports s-Flow monitoring
IEEE 802.1ab (LLDP)	<ul style="list-style-type: none"> • Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network • Support LLDP-MED extensions
Dual Firmware Images	Independant primary and secondary firmware images
Multiple Configuration Files	Multiple versions of configuration can be saved on the switch. Config files can be backed exported and imported.
SNMP	SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
Diagnostics	
IPv4 Ping	Used to test connectivity to IPv4 devices
IPv6 Ping	Used to test connectivity to IPv6 devices
VeriPHY	Cable diagnostics to determine correct pin out and cable length
Traceroute	used to determine route to IP Address to Hostname

Specifications

Port Configuration

Total Ports	Paired UTP/SFP Ports	SFP Ports	SFP+ Ports	Console Port
28	4x 10/100/1000Mbps / 4x 100M/1000M	20x 100M/1000M	4x 1000M/10Gb	DB9

Hardware Performance

Forwarding Capacity	Switching Capacity	MAC Table	Jumbo Frames	Latency
95.232Mpps	128Gbps	32K	10K	1000M TP: < 3.9ms
				1GB SFP: < 3.2ms; 10GB SFP: < 2.2µs

Memory and Processor

SDRAM	Flash
128MB	32MB

Voltage and Frequency

AC Input Voltage	DC Input Voltage	Frequency
100-240 VAC	24 - 72 VDC	50 ~ 60 Hz

Environmental

Operating Temperature		Storage Temperature		Altitude		Operating Humidity
Fahrenheit	Centigrade	Fahrenheit	Centigrade	Feet	Metres	
32° to 104°	0° to 40°	-4° to 158°	-20° to 70°	< 10000	< 3000	10% to 90% non-condensing

Weights and Dimensions

Dimensions (WxHxD)		Weight	
Millimetres	Inches	Kilograms	Pounds
442 x 44 x 211	17.4 x 1.73 x 8.3	2.5	5.5

Mounting

Rackmount	Desktop
EIA-standard 19in rackmount brackets included	Rubber feet included for desktop mount

Warranty Information

Warranty

Limited Lifetime Warranty

Package Contents

- AS5128-F Switch
- Power Cable
- Serial Console Cable
- Rackmount Kit and Rubber Feet
- Warranty Information

Ordering Information

Model	Description
AS5128-F	28 Port Layer 3 Lite Managed Gigabit Fibre Switch with 24x 100/1000M SFP Ports + 4x 1000M/10Gb SFP Ports

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