

## **AGS3648 Gigabit Ethernet Switch**

### **48x 1000BaseT GE with 6x SFP+ Switch**

### **L3 Management Ethernet Switch**



#### Product Highlight :

- Flexible Port Configuration :  
48 GE with 6 XGT/SFP+ Combo
- Support L3 Management
- Standard 19" 1U rack mount design
- Support CLI and Web Management
- Add-on Features :  
POE/PSE, Fan Control, GPIO
- Tailor-made or Turnkey solution available

Our AGS3648 is an industrial Layer 3 network management switch, with maximum of 48 gigabit Ethernet ports and 6 10-gigabit SFP+ optical ports and optional to XGT Ethernet ports. It supports Layer 3 static routing. The total switching capacity is as high as 206Gbps, can handle a large number of data forwarding.

#### **High Density Design**

The use of Realtek RTL9311 gigabit Ethernet switch chipset allows higher integration and more flexible port configuration design. It supports total 54 ports in a 19" 1U rack mount design.

#### **User Friendly Web Management**

The AGS3648 provides an user friendly web management system. The L3 management features can be easily accessed and configured through an Ethernet port.

#### **Data Input and Output of Alarm System (Optional to model AGS3648P)**

There are two sets of data output, which can be set to alarm the output of switch power loss, port loss and port POE loss. There are two sets of data input, which can be used to detect the alarm signals of external alarms such as infrared detectors. Data inputs and outputs can be set on the web administration page.

#### **Excellent Protection Ability, Able to Adapt to Harsh Environment**

The use of industrial grade chipset and components allow the device working at temperature -40 to 75°C without data loss. Lightning protection and electrostatic protection designs to meet the EMI and EMS international standards.

## Hardware Specifications

Item	Detail
Ethernet Port	48 x 1000 Base-T RJ45
Optical Port	6 x SFP+ (can be modified to 6 x 10G Base-X RJ45 or combo)
Control Port	1 x RJ45-R232 Serial Port (115200,8,N,1)
OOB Port	1 x 10/100 Base-TX RJ45 (only to web management)
Init Key	Press to Restart Press and Hold >5s to Default Recovery
Power	AC 100~240V 50/60Hz
Power Consumption	60 W
Data (Alarm) Input / Output	2 x Digital Input for external alarm 2 x Digital Output for the switch power failure cable link down & PoE link off Signal Type : normal-open or normal-closed from relay
Standard	IEEE802.3,IEEE802.3u,IEEE802.3ab,IEEE802.3Z, IEEE802.3X,IEEE802.1Q,IEEE802.1p, IEEE802.3ad,IEEE802.1D,IEEE802.1X
Exchange Capacity	206Gbps / non-blocking
Package Conversion Rate	128.4 Mpps@64bytes
Exchange Mode	Store-and-Forward
Package Data Cache	16Mbit
MAC Address List	32k
Jumbo Frame	12k bytes
EMI	FCC Part 15, CISPR(EN55022) Class A
EMS	Surge level-4 execute : IEC61000-4-5 ESD level-4 execute : IEC61000-4-2 RS level-4 execute : IEC61000-4-3 EFT level-4 execute : IEC61000-4-4 CS level-3 execute : IEC61000-4-6 M/S level-5 execute: IEC61000-4-8
Operating Temperature	0 ~ 70°C
Storage Temperature	-10 ~ 85°C
Size (LxWxH)	440mm x 220mm x 45mm
Weight	4.5kg
Identification	CE, FCC, ROHS

## Software specifications

Feature List	Specification Detail	Status
MAC Address Table		32K
Jumbo Frame		12K
Flow Control	802.3x (Full-duplex)	Yes
	Back-Pressure (Half-duplex)	Yes
Spanning Tree	IEEE 802.1D (STP)	Yes
	IEEE 802.1w (RSTP)	Yes
	IEEE 802.1s (MSTP)	64 instances
	Auto Edge Port	Yes
	BPDU Filtering	Yes
	Self Loop Detection	Yes
Link Aggregation	IEEE 802.3ad LACP	Yes
	Static Trunk	Yes
	Max. Group	64
	Max. Ports/Group	8
	Traffic Load Balancing	Yes
<b>VLAN</b>		
Voice VLAN	Static VLAN	4K
	Port-based	Yes
	IEEE 802.1Q Tagged-based	Yes
	Protocol-based	8 groups
	MAC-based	1K (shared)
	OUI Mode (Auto/Manual)	16 OUI
Surveillance VLAN	OUI Mode (Auto/Manual)	16 OUI
QinQ (IEEE 802.1ad)	Basic	Yes
GARP VLAN Registration Protocol (GVRP)		Yes
<b>Multicast</b>		
Common	Multicast Groups	1K
	Immediate Leave	Yes
	Static/Forbidden Router Port	Yes
	Static/Forbidden Forward Port	Yes
	Filtering	128 profiles
	Throttling	Yes

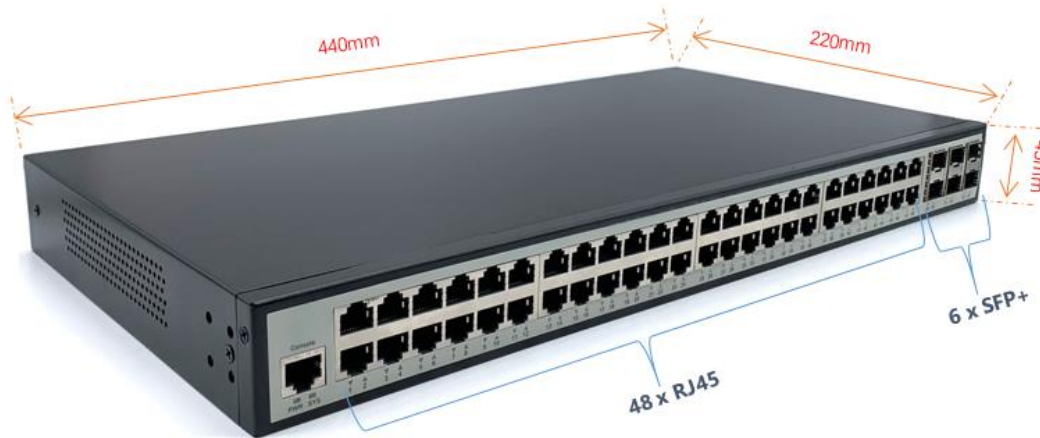
Feature List	Specification Detail	Status
IGMP Snooping	IGMP v1/v2	Yes
	IGMP v3 Basic (BISS)	Yes
	IGMP v2/v3 Querier	Yes
MLD Snooping	MLD v1/v2	Yes
Multicast VLAN Registration (MVR)		Yes
<b>QoS Features</b>		
Priority Queue		8 queues/port
Queue Scheduling	WRR	Yes
	WFQ	Yes
	Strict Priority	Yes
	Hybrid(WRR+SP or WFQ+SP)	Yes
Class of Service	Port-based	Yes
	802.1p	Yes
	IP TOS Precedence	Yes
	IP DSCP	Yes
Trusted QoS		Yes
Rate Limit	Port-based (Ingress/Egress)	Yes
<b>Access Control List (ACL)</b>		
Access Rules		2048
ACL Type	L2/L3/L4 MAC-based	Yes
	IPv4-based	512
<b>Security</b>		
AAA	Authentication	Yes
TACACS+		8
RADIUS		8
Authentication Manager	IEEE 802.1X	Yes
	MAC Auth	Yes
	Web Auth	Yes
	Guest VLAN	Yes
	Port-based	Yes
	Host-based	Yes
Account Manager	Local Authenticatoin	Yes
	Multiple User Account	8
	Multi-Level Security	Yes
	Password Recovery Procedures	Yes

Feature List	Specification Detail	Status
Management Access	Management VLAN	Yes
	Management ACL	256
	SSLv2	Yes
SSL	SSLv3	Yes
	TLSv1	Yes
WebUI	HTTPS	Yes
CLI	SSH v1/v2	Yes
Port Security	Dynamic Lock	256
Storm Control	Broadcast	Yes
	Unknown Multicast	Yes
	Unknown Unicast	Yes
Spanning Tree	BPDU Guard	Yes
Protected Port (Port Isolation)		Yes
Black Hole MAC		Yes
CPU Defence Engine		Yes
DoS Prevention		Yes
DHCP Snooping (with Option 82)		Yes
Dynamic ARP Inspection		Yes
IP Source Guard		256
IP/MAC/Port Binding (IMPB)		Yes
<b>IPv6</b>		
IPv6 Host	Auto Configuration	Yes
	Static IPv6 Address and Prefix Length	Yes
	Static IPv6 Default Gateway	Yes
	IPv6 Neighbor Discovery (ND)	Yes
	IPv6 Duplicate Address Detection	Yes
	ICMPv6	Yes
	IPv6 Application	HTTP/HTTPS
	TELNET	Yes
	SSH	Yes
	SNMP	Yes
	TFTP	Yes
	Syslog	Yes
	PING	Yes
	DHCPv6	Yes

Feature List	Specification Detail	Status
<b>Management</b>		
CLI	Console	3 sessions
	Telnet (RFC854)	
WebUI	HTTP	Yes
	v1	Yes
	v2c	Yes
SNMP	v3	Yes
File Management	Firmware Upgrade/Backup	Yes
	Dual Images	Yes
	Configuration Download/Backup	Yes
	Multiple Configurations	Yes
Upload/Download	TFTP (RFC783)	Yes
	HTTP	Yes
	UART	Yes
Time Management	Local	Yes
	SNTP	Yes
Port Management	Friendly Port Name (Port Description)	Yes
	Error Disabled Recovery	Yes
Line Management	Console	Yes
	Telnet (RFC854)	Yes
	SSH v1/v2	Yes
DHCP	Client	Yes
	DHCP SNOOPING	yes
	Server	yes
	Relay	yes
	option43	yes
	option82	yes
DNS	Client	Yes
Software Reset Button		Yes
EEE (802.3az)		Yes
RMON Management		32 entries / type
<b>Discovery</b>		
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)		Yes
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)		Yes

Feature List	Specification Detail	Status
<b>Diagnostics</b>		
Mirroring	Port-based (Many to One)	4 sessions
Syslog (RFC3164)	Local RAM	Yes
	Local Flash	Yes
	Remote Server	8
System Diagnostics	CPU Utilization	Yes
	Memory Utilization	Yes
	Port Utilization	Yes
Port Diagnostics	Cable Test	Yes
	Fiber Module Status	Yes
Network Diagnostics	Ping Test	Yes
	Traceroute	Yes
UDLD		Yes
<b>MIB</b>		
RFC1213 MIBII (System & Interface groups)		Yes
RFC2819 RMON I (1,2,3, & 9 groups)		Yes
RFC1215 Generic Traps		Yes
RFC1493 Bridge		Yes
RFC2674 Bridge MIB Extensions		Yes
RFC2737 Entity		Yes
RFC3635 Ethernet-Like		Yes
RFC2863 Interface Group		Yes
SNMP-Community-MIB		Yes
SNMPv3		Yes
POE	POE port config	Yes
	poe timer	Yes
rip	v1/v2	Yes
ospf	v1/v2	Yes
loopback-detection		yes
erps		yes
vrrp		yes
NTP		yes

## Product Dimensions



## Production Packaging

Item	Detail
Switch	1pcs
suspension loop	2pcs
AC power line	1pcs
Package Size	520*320*125mm







## **Order Information**

Product Description  
48 + 6 SFP+ L3 management Ethernet switch

Order Code  
AGS3648