Product Specification

Industrial Switch – DIN rail / Wall mounting options

(8) 10/100/1000Base-T (8 PoE+) ports

(2) 10/100/1000Base-T ports

(4) 100/1000Base-X SFP slots

240 Watts PoE Budget

Overview

aTrian industrial L2+ managed switches are the next generation of industrial grade Ethernet switches offering L2 and basic L3 functionalities. aTrian switches also provides advanced features like OAM, CFM, ERPS, EPS, PTPv2.
We offer multiple ports option with PoE+ (802.3 at/af), RJ45 console port, dual power supply inputs, I/O port and quick ring configuration settings.
aTrian switches include advanced web GUI interface as well as industry standard CLI syntax. Our switches have been designed to provide quick deployment and easy maintenance for video surveillance, wireless access and other industrial applications.

Key Features

- **Switching Bandwidth:** 28 Gbps
- **Forwarding Performance:** 20.83 Mpps
- **Jumbo Frames:** 9600 Bytes
- **VLAN:** 4 K
- **MAC Address:** 8 K
- **Temperature:** -40~+75°C (Industrial)
- **RAM:** 128 MB

Regulatory Compliance

aTrian Communication Technologies switches complies with EN61000-4-5 (for RJ45 Port, Surge 6KV). EMS (EN61000-4-2 ESD, EN61000-4-4 EFT), EMI (FCC Part 15 Class A).

Technical Specifications

General Parameters	Symbol	Min.	Typical	Max.	Unit
Storage Temperature	Ts	-40		+85	°C
Operating Temperature	Tc Industrial	-40		+75	°C
Power Supply Voltage	Vcc	48		55	V
PoE Power Budget	P_{MAX}			240	W
PoE Power PIN	P_{PIN}		1/2- ; 3/6+		
Altitude	Alt			3000	mts
Dimension (L×W×H)	D		188x130x64		mm
Weight	W			1.3	Kg

Ports	Symbol	Min.	Typical	Max.	Unit
Copper Ports 10/100/1000	Cu		10		unit
PoE Ports	Cu PoE		8		unit
SFP Ports 100/1000	SFPp		4		unit

Hardware Performance	Symbol	Min.	Typical	Max.	Unit
Forwarding Capacity	F_C			20.83	Mpps
Switching Capacity	S_C			28	Gbps
Mac Table	MAC_T			8	K
Jumbo Frames	J_F			9600	Bytes

Certifications	Parameters	Value
Regulatory Compliance	EMS	EN61000-4-2 ESD, EN61000-4-4 EFT, EN61000-4-5 SURGE
	EMI	FCC Part 15, CISPR (EN55032) class A
	Safety	CE, FCC, ROHS
Mechanical Stability	Vibration	IEC 60068-2-6
	Shock	IEC 60068-2-27
	Freefall	IEC 60068-2-32

Sofware	Parameters	Value
Ring Management	ITU-T G.8031	Supports ITU-T G.8031 Ethernet Linear Protection Switching
	ITU-T G.8032	Supports ITU-T G.8032 Ethernet Ring Protection Switching

Device Management System	Trouble Shooting	Cable diagnostic between master switch and devices. Support protection mechanism, such as rate-limiting to protect your devices from brute-force downloading Support performance management and link management through IEEE 802.3ah and IEEE 802.1ag (Y.1731)
Ethernet OAM	IEEE 802.3ah OAM	Supports Operations, Administration & Management
	IEEE 802.1ag & ITU-T Y.1731 Flow OAM	Supports IEEE 802.1ag Ethernet CFM (Connectivity Fault Management) Supports ITU-T Y.1731 Performance Monitoring
Layer 2 Switching	Spanning Tree Protocol (STP)	Standard Spanning Tree 802.1d Rapid Spanning Tree (RSTP) 802.1w Multiple Spanning Tree (MSTP) 802.1s
	Trunking	Link Aggregation Control Protocol (LACP) IEEE 802.3ad Up to 6 groups and up to 4 ports per group
	VLAN	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)
	DHCP Relay	Relay of DHCP traffic to DHCP server in different VLAN. Works with DHCP Option 82
	IGMP v1/v2/v3 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters. Supports 1024 multicast groups
	IGMP Querier	IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router
	IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router
	MLD v1/v2 Snooping	Delivers IPv6 multicast packets only to the required receivers
	Multicast VLAN Registration (MVR)	It uses a dedicated manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping.
Layer 3 Switching	IPv4 Static Routing	IPv4 Unicast: Static routing
	IPv6 Static Routing	IPv6 Unicast: Static routing
Security	Secure Shell (SSH)	SSH secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported
	Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
	IEEE 802.1X	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
	Layer 2 Isolation 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 to specific port in 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

Security		unicast storm on a port
	DHCP Snooping	A feature acts as a firewall between untrusted hosts and trusted DHCP servers
	ACLs	Supports up to 256 entries. Drop or rate limitation based on: 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
QoS	Hardware Queue	Supports 8 hardware queues
	Scheduling	Strict priority and weighted round-robin (WRR) Queue assignment based on DSCP and class of service
	Classification	Port based 802.1p VLAN priority based IPv4/IPv6 precedence / DSCP based Differentiated Services (DiffServ) Classification and re-marking ACLs
	Rate Limiting	Ingress policer Egress shaping and rate control Per port
Management	DHCP Server	Support DHCP server to assign IP to DHCP clients
	Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.
	UPnP	The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
	IEEE 802.1ab (LLDP)	Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network Support LLDP-MED extensions
	Web GUI Interface	Built-in switch configuration utility for browser-based device configuration
	CLI	For users to configure/manage switches in command line modes
	Dual Image	Independent primary and secondary images for backup while upgrading
	SNMP	SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
	Firmware Upgrade	Web browser upgrade (HTTP/ HTTPs) and TFTP Upgrade through console port as well
	NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
	Other Management	HTTP/HTTPs; SSH DHCP Client/ DHCPv6 Client Cable Diagnostics Ping Syslog IPv6 Management

Ordering Information

Part Number	Description
AT900-IDMP3-8GT2GT4GS	Industrial DIN Rail PoE Managed Switch 8 (10/100/1000) RJ45 (8 PoE+) ports 2 (10/100/1000) RJ45 4 (100/1000) SFP ports Serial Console Port

Warranty

ONE year of limited warranty for products sold directly by aTrian Technologies, unless special agreements have been set. Warranty period start from the ship date and will be only valid for the original customer who bought the product. If you have purchased the product from a reseller you must contact him directly. RMA Form and full warranty details are available on our website.