

# **Product Specification**

Industrial Switch - DIN rail / Wall mounting options

- (8) 10/100/1000Base-T (8 PoE+) ports
- (2) 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. We offer multiple ports option with PoE+ (802.3 at/af), RJ45 console port, dual power supply inputs, ERPS 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: 20Gbps, Non-blocking

Jumbo Frames: 9600 Bytes

VLAN: 4 K

MAC Address: 8 K

Temperature: -40~+75°C (Industrial)

Housing: IP40 Protection, Aluminum alloy, Fan-less

### **Regulatory Compliance**

aTrian Communication Technologies switches complies with EN61000-4-5 (for RJ45 Port, Surge 6KV). EMC (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
	Vcc	48	54	57	V
Power Supply Voltage	V <sub>MIN</sub> PoE 15.4 W	48			V
	V <sub>MIN</sub> PoE 30 W	54			V
PoE Power Budget	P <sub>MAX</sub>			240	W
Dimension (L×W×H)	D		169x117x50		mm
Weight	W			0.75	Kg

Ports	Symbol	Min.	Typical	Max.	Unit
Copper Ports 10/100/1000	Cu		8		unit
PoE Ports	Cu PoE		8		unit
SFP Ports 100/1000	SFPp		2		unit

Hardware Performance	Symbol	Min.	Typical	Max.	Unit
Switching Capacity	Sc			20	Gbps
Mac Table	$MAC_T$			8	K
Jumbo Frames	J <sub>F</sub>			9600	Bytes

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

Sofware	Parameters	Value
ITU-T G.8032	ITU-T G.8032	Supports ITU-T G.8032 Ethernet Ring Protection Switching
Ring	Trouble Shooting	Support performance management and link management through IEEE 802.3ah and IEEE 802.1ag (Y.1731)
Management	Spanning Tree Protocol (STP)	Standard Spanning Tree 802.1d Rapid Spanning Tree (RSTP) 802.1w Multiple Spanning Tree (MSTP) 802.1s
Layer 2 Switching	Trunking	Link Aggregation Control Protocol (LACP) IEEE 802.3ad



		COMMUNICATION TECHNOLOGIES
	VLAN	Port-based VLAN 802.1Q tag-based VLAN MAC-based VLAN Management VLAN Q-in-Q (double tag) VLAN
	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.
	IPv4 Static Routing	IPv4 Unicast: Static routing
Layer 3 Switching	IPv6 Static Routing	IPv6 Unicast: Static routing
	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
Security	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 unicast storm on a port
	DHCP Snooping	A feature acts as a firewall between untrusted hosts and trusted DHCP servers
Security	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
	Hardware Queue	Supports 8 hardware queues
QoS	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		
		Ingress policer		
	Rate Limiting	Egress shaping and rate control		
		Per port		
	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		
Management	Dual Image	Independent primary and secondary images for backup while upgrading		
Fire	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
AT800-IDMP3-8GT2GS-A	Industrial DIN Rail PoE Managed Switch 8 (10/100/1000) RJ45 (8 PoE+) ports 2 (100/1000) SFP ports Serial Console Port
AT800-WMK	Wall Mounting Kit

### Warranty

FIVE years 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.