

# 1U Rackmount Industrial-Class Switch with Combo Port Flexibility 24GbE + 4 10GbE Managed Switch



#### **Features**

- Switching architecture with 24x GbE ports and 4x 10GbE ports
- 16x gigabit combo ports (1000BASE-T/TX or GbE SFP)
- 4x 10 Gigabit SFP+ ports
- 2x redundant power 110 ~ 220 V<sub>AC</sub> input
- Fanless design
- IEEE1588 PTPv2 with 1-step precision clock
- 128 Gbps switch fabric capacity supported
- Embedded hardware monitor
- Operating temperature -10 ~ 60° C



### Introduction

The EKI-9778 Industrial-Class switch represents the entry level of Advantech's rackmount industrial class switch portfolio; EKI-9778 Industrial-Class switch is designed for flexible installation, and can be deployed in demanding industrial environments. The EKI-9778 gigabit combo switch design makes network planning easy, and allows greater flexibility for users install up to 16 Gigabit Ethernet combo ports plus 8 Gigabit 1000Base-X and 4 10 Gigabit SFP+ ports, making EKI-9778 suitable for edge to core industrial networks. It integrates Layer 2 switching software, which is optimized for scale and performance, delivering wire speed across all ports up to 128Gbps for layer 2 traffic forwarding. In addition, the fanless convection design provides a high degree of reliability, operating under -10 ~ 60° C operating temperatures, and two built-in 110 ~ 220 VAC input redundant power modules ensure vital network capabilities with minimum downtime.

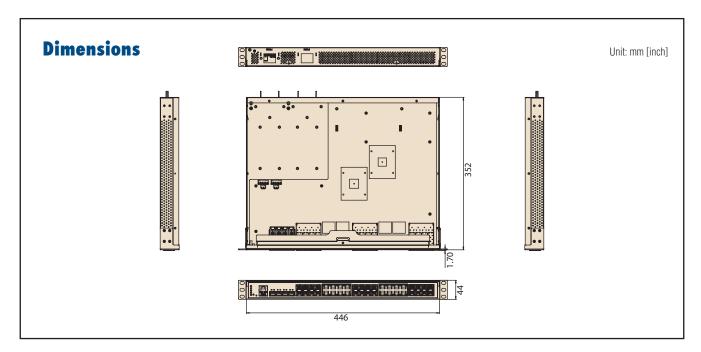
## **Specifications**

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Interface	I/O Port	4 x 10GbE SFP+ slot 8 x 1000Base-X SFP 16 x Gigabit Combo Port (10/100/1000Base-T(X) or 1000Base-X SFP)
	Console port	RJ-45
	F/W upgraded	USB
	Power Connector	AC Socket
Physical	Enclosure	Metal Shell
	Installation	Rack-Mount
	Dimensions (W x H x D)	446 x 44 x 352 (mm)
LED Display	System LED	PWR1, PWR2, SYS, CFG, Alarm
	Port LED	Link / Activity / Speed
Environment	Operating Temperature	-10 ~ 60° C
	Storage Temperature	-40 ~ 85° C
	Ambient Relative Humidity	5 ~ 95% (non-condensing)
	Humidity	5 ~ 95% (non-condensing)
Power	Power Consumption	~72 Watts Max
	Power Input	110 ~ 220 V <sub>AC</sub> Redundant Inputs
	EMI	FCC Part 15 Subpart B Class A CE EN55022, EN55024
Cartification	Safety	EN 60950-1*
Certification	Shock	IEC 60068-2-27
	Freefall	IEC 60068-2-32
	Vibration	IEC 60068-2-6
L2 Features	L2 MAC Address	16K
	Jumbo Frame	12KB
	VLAN Group	4K (VLAN ID 1~4094)
	VLAN Arrange	Mac based VLAN, Protocol based VLAN, IP subnet based VLAN, Port based VLAN, Q-in-Q (VLAN Stacking), GVRP
	Port Mirroring	Per port, Multi-source port
	IP Multicast	IGMP Snooping v1/v2/v3, MLD Snooping, IGMP Immediate leave
	Storm Control	Broadcast, Multicast, Unknown unicast
	Spanning Tree	IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP, X-Ring+

## **Specifications Cont.**

QoS	Scheduling for priority queue	WRR (Weighted Round Robin), SP (Strict Priority), Hybrid Priority
	Class of Service	IEEE 802.1p Based CoS, IP TOS, DSCP based CoS
	Rate Limiting	Ingress Rate limit, Egress Rate limit
	Link Aggregation	IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking
Convitu	Port Security	Static, Dynamic
	Authentication	802.1x (Port-Based, MAC-Based, MD5/TLS/TTLS/PEAP Encryption), RADUIS, TCACAS+
Security	ACL	1K rules
	Advanced Security	IP Source guard, ARP inspection, DHCP Snooping
	DHCP	Client, Server, Relay, Option66/67/82
	Access	SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard MIB, Private MIB
Management	Security access	SSH2.0, SSL
	Software upgrade	TFTP, HTTP, Dual Image
	NTP	NTP client/server

<sup>\*</sup> EN 60950-1 Shall be ready by 2014, December



# **Ordering Information**

Part number	Description	Product Status
EKI-9778-F0SA820E	Layer 2 Fastpath, 8xGbE SFP slot + 16xGbE Combo Port + 4x(10GbE SFP+ slot) w/110 ~ 220 V <sub>AC</sub> Redundant Power Input	Mass Production

Contact our sales for more pricing & ordering information.