## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# EKI-7657C/CI

#### 7+3G Combo Port Gigabit Managed **Redundant Industrial Ethernet Switch** with 2 x DI/O



#### **Features**

- 3 Gigabit Copper/SFP combo ports, plus 7 Fast Ethernet ports
- 2 Digital Inputs and 2 Digital Outputs for Events and Alarms in the Network
- SFP socket for Easy and Flexible Fiber Expansion
- Redundancy: Gigabit X-Ring Pro (ultra high-speed recovery time < 20 ms), RSTP/STP (802.1w/1D)
- Management: Web, Telnet, Serial Console, SNMP
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SSL, SNMPv3
- Diagnostic: Port Statistics, Port Mirroring, RMON, Trap, Email Alert, Syslog
- Dual 12 ~ 48 V<sub>DC</sub> power input and 1 relay output
- Operating temperature from -40 to 75°C (EKI-7657CI)

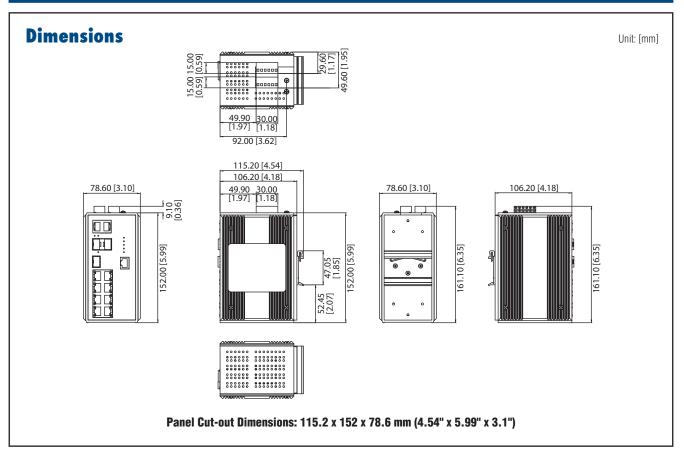
#### Introduction

The EKI-7657C supports seven Fast Ethernet ports and three Gigabit combo ports with 2 x Digital Input and Digital Output ports. To create reliability in your network, the EKI-7657C comes equipped with a proprietary redundant network protocol -- X-Ring Pro that was developed by Advantech, which provides users with an easy way to establish a redundant Ethernet network with ultra high-speed recovery time less than 20 ms. Furthermore, the EKI-7657C also supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety.

#### **Specifications**

Communications		<ul> <li>Security</li> </ul>	IP Access security, port security, DHCP Server, Port
	IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1D, 802.1w, 802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab	<ul> <li>Traffic Control</li> </ul>	and IP Binding, 802.1X Port Access Control, SSL IGMP Snooping/Query for multicast group management, Port Trunking, Static/802.3ad, LACP Rate
	10/100/1000Base-T (X), Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX		limit and storm control, IEEE 802.1p QoS CoS/TOS/ DSCP priority queuing, IEEE 802.3x flow control
	Ethernet: Up to 100 m (4- wire Cat.5e, Cat.6 RJ45 cable suggested for Gigabit port) SFP: Up to 110 km (depends on SFP)	<ul> <li>Diagnostics</li> </ul>	Port Mirroring, Real-time traffic statistic, MAC Address Table, SNTP, Syslog, Email Alert, SNMP Trap, RMON
·	Ethernet: 10/100 Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps	· · · · · · · · · · · · · · · · · · ·	IP30, metal shell with solid mounting kits 79 x 152 x 105 mm (3.11" x 5.98" x 4.13")
Interface		<ul> <li>Mounting</li> </ul>	DIN-rail, Wall
<ul><li>LED Indicators</li></ul>	7 x RJ45 (Ethernet) 3 x RJ45/SFP (mini-GBIC) combo ports 1 x 6-pin removable terminal (Power & Relay) 1 x 6-pin removable terminal (DI/DO) System: PWR, PWR1, PWR2, R.M., P-Fail	Power Power Consumption Power Input Fault Output	Max. 10.7 W 12 ~ 48 V <sub>DC</sub> , redundant dual inputs 1 Relay Output
	10/100T (X): Link/Activity, Duplex/Collision Gigabit Copper: Link/Activity, Speed (1000 Mbps) SFP: Link/Activity RS-232 (RJ45)	Protection <ul> <li>Power Reverse</li> <li>Overload Current</li> </ul>	Present Present
Network Management		Environment	
<ul><li>Configuration</li><li>VLAN</li></ul>	Web browser, Telnet, Serial console, TFTP, SNMPv1/v2c/v3, Port Speed/Duplex Configuration, IPv6 IEEE 802.1Q, GVRP, Port-based VLAN	<ul> <li>Operating Temperature</li> <li>Storage Temperature</li> <li>Operating Humidity</li> </ul>	-40 ~ 75°C (-40 ~ 167°F) (EKI-7657CI) -40 ~ 85°C (-40 ~ 185°F) 5 ~ 95% (non-condensing)
	Advantech X-Ring Pro (Recovery time < 20 ms at 250 pcs full loading ring structure), Dual Homing, Dual Ring, Couple Ring, 802.1w/D RSTP/STP	<ul> <li>Storage Humidity</li> <li>MTBF</li> </ul>	0 ~ 95% (non-condensing) 284,409 hours

#### EKI-7657C/CI



#### Certifications

- Safety UL 60950-1, CAN/CSA-C22.2 No.60950
- EMI FCC Part 15 Subpart B Class A, EN 55022 Class A
- EMS

FCC Part 15 Subp EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 IEC 60068-2-27

IEC 60068-2-32

- Shock
- Freefall
- Vibration IEC 60068-2-6

#### **Ordering Information**

- EKI-7657C
- EKI-7657CI
- 7FE + 3G Combo Port Managed Ethernet Switch w/ 2 x DI/DO
- 7FE + 3G Combo Port Managed Ethernet Switch w/ 2 x DI/DO and Wide Temp