

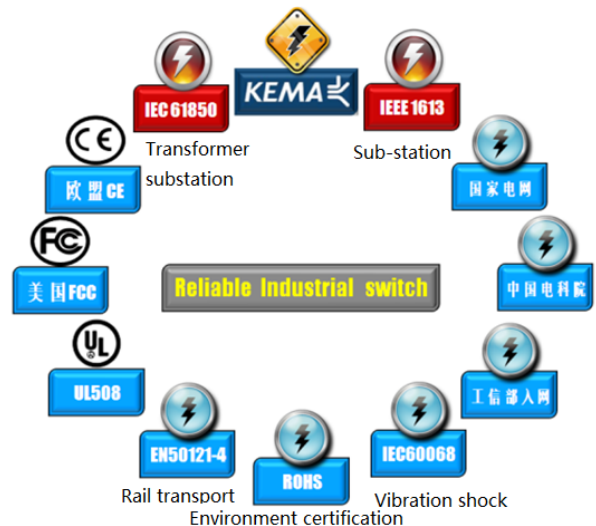


Gazelle S1512i-4GF-8GE-PWR-DC48 GE POE Industrial Ethernet Switch

Brief introduction

The **Gazelle S1512i-4GF-8GE-PWR-DC48 GE POE industrial Ethernet switch** is designed for the Automatic Control System (ACS) in the industrial field and can operate stably for a long time in harsh environments. It supports flexible interface portfolio, PoE (IEEE802.3af/at), and complete Layer 3 routing protocols. The Gazelle S1512i-PWR features leading ring network technologies in the industry, supports multiple redundant ring network protocols, such as ITU G.8032, through which any interface can form a ring with other devices, and supports chain, star, dual-star, ring, tangent ring, and intersecting ring, with sub-20ms self-healing of the ring network. Featuring high reliability, security, and manageability, the Gazelle S1512i-PWR ensures secure transmission of key data. It also supports remote management and can work with Raisecom NView NNM system for cluster management, implementing seamless network management during the whole process.

The Gazelle S1512i-PWR is highly adaptive to industrial environments in terms of mechanical stability, climate adaptability, electromagnetic environment adaptability, and so on. It is IP40-rated, provides dual redundant power supplies, adopts low-power fanless cooling technology, and ensures up to 35-year Mean Time Between Failures (MTBF). The Gazelle S1512i-PWR can be widely used not only in the electric power industry, but also in transportation, coal, petroleum, metallurgy, water treatment and other industries.



International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing, 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2018
All rights reserved
Technical information is subjected to
change without notice



Device figure



Technical specifications

Model	Gazelle S1512i-4GF-8GE-PWR
Description	<ul style="list-style-type: none"> • Eight 10/100/1000BASE-T auto-negotiation Ethernet electrical interfaces, IEEE802.3af/at-compliant • Four 100BASE-FX/1000BASE-T auto-negotiation Ethernet SFP optical interfaces • All-metal enclosure • Fanless design • Compact structure • IP40-compliant • Guide rail, wall-mount, or rack installation
Basic information	
Service interfaces	<ul style="list-style-type: none"> • Eight 10/100/1000BASE-T auto-negotiation Ethernet electrical interfaces, IEEE802.3af/at-compliant • Four 100BASE-FX/1000BASE-T auto-negotiation Ethernet SFP optical interfaces
Other interfaces	<ul style="list-style-type: none"> • Console interface: RJ45 connector • Alarm interface: 3-pin Phoenix connector, SPDT

International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing, 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright©1999-2018
All rights reserved
Technical information is subjected to
change without notice



Model	Gazelle S1512i-4GF-8GE-PWR
	<ul style="list-style-type: none">Reset button: short press (< 3s) for restarting the device, long press (> 3s) for restoring factory settings and restarting the deviceInput DI: -30 to +3 VDC represents "0" while 13–30 VDC represents "1".
LED	<ul style="list-style-type: none">Power LED: PWR1 and PWR2System LED: SYSSystem alarm LED: ALMInterface status LED: LNK/ACT (for optical interfaces) or LNK/ACT and SPEED (for electrical interfaces)
Dimensions (Width × Height × Depth)	80 mm × 150 mm × 130 mm (Width × Height × Depth), with a 25 mm-high cooling fin
Weight	< 1.7 kg
Installation mode	Wall-mount, DIN guide-rail, and rack-mount tray
Protection grade	IP40
MTBF	35 years
Operating voltage	DC48 <ul style="list-style-type: none">Rated voltage: 48 VDCVoltage range: 44–57 VDC
Power	< 15 W
PoE output power consumption	< 240 W
Operating temperature	-40 °C to +75 °C
Storage temperature	-40 °C to +85 °C
Relative humidity	5%–95%, non-condensing

International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing, 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright©1999-2018
All rights reserved
Technical information is subjected to
change without notice



Model	Gazelle S1512i-4GF-8GE-PWR
Backplane bandwidth	24 Gbit/s
MAC address table	16K, automatic learning
Features	
PoE	<ul style="list-style-type: none">• Be compatible with 802.3af/at PDs.• Support power detection and classification for PDs.• Support restriction to PoE power consumption, PD fault check, and display of PoE output status.• Support alarm output when PD power consumption is exceeded.• Support manual configuration and automatic configuration.
Switching mode	Store and Forward, 12 Mbit switching cache
Frame length	9216 bytes
Storm control	Support storm control over broadcast and unknown multicast packets based on the number of bytes (bps).
Interface loop detection	<ul style="list-style-type: none">• When a loop is detected, the interface can be automatically shut down.• When the loop is eliminated, the interface can be automatically unblocked again.• You can configure the detection interval.
Multicast	<ul style="list-style-type: none">• Support IGMP Snooping v1, v2, and v3.• Support filtering multicast packets and discarding unknown multicast packets.• Support static multicast groups.• Support 1024 multicast groups.
Spanning tree	Support STP, MSTP, and RSTP.
Industrial ring network protocols	<ul style="list-style-type: none">• Support G.8032 (ERPS).• Support up to 32 rings. Each ring supports up to 1024 devices.• The self-healing time of the ring network is less than 20ms.

International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing. 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2018
All rights reserved
Technical information is subjected to
change without notice



Model	Gazelle S1512i-4GF-8GE-PWR
Mirroring	<ul style="list-style-type: none"> Support multiple-to-one port mirroring, namely, multiple source ports and one mirroring port. Support respective mirroring in the ingress and egress direction of the interface.
MAC address	<ul style="list-style-type: none"> Support 16K MAC addresses. Support 1024 static MAC address bindings. Support adding/deleting MAC addresses and showing statistics.
Flow control	<ul style="list-style-type: none"> Support IEEE 802.3x flow control in full duplex mode. Support back pressure flow control in half duplex mode.
VLAN	<ul style="list-style-type: none"> Support 4094 concurrent VLANs (VLAN 1–4094). Support multiple VLAN partitions on a single interface.
Advanced features	
QoS	<ul style="list-style-type: none"> Support IEEE 802.1p CoS, DSCP, and interface priority. Support trusting local priority. Support trusting CoS and DSCP priority. Support global queue scheduling. Each interface supports 8 queues. Support 3 types of priority queues and 4 scheduling modes (SP, WRR, SP+WRR, and SP+DRR).
Bandwidth control	<ul style="list-style-type: none"> Range: 1–1000 Mbit/s (1000 Mbit/s interface) Granularity: 64 kbit/s Support ingress rate limiting based on interface, and traffic rate limiting based on packet type and queue priority.
Security	<ul style="list-style-type: none"> Support hierarchical management on users and password protection.

International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing. 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2018
All rights reserved
Technical information is subjected to
change without notice



Model	Gazelle S1512i-4GF-8GE-PWR
	<ul style="list-style-type: none"> • Support RADIUS authentication. • Support TACACS+ authentication. • Support interface protection.
Layer 3 routing	<ul style="list-style-type: none"> • Support dynamic routing protocols, such as RIP and OSPF. • Support VRRP.
Management features	
System management	<ul style="list-style-type: none"> • Support CLI configurations. • Support CLI help in both Chinese and English. • Support remotely configuring multiple SSH v2 clients. • Support RMON group 1, 2, 3, and 9 MIB. • Support SNMP v1/v2c/v3. • Support Raisecom NMS. • Support system log. • Support alarm outputs through Trap and Syslog. • Support KeepAlive reports.
Time management	<ul style="list-style-type: none"> • Support timezone management. • Support time modification. • Support DST. • Support the SNTP client to be synchronized with the system time. • Support NTP.
DHCP	Support DHCP Client/Server/Snooping/Relay
Task scheduling	Support running the task periodically or during a specified time.
Tolerance and	<ul style="list-style-type: none"> • Support system error report.

International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing. 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2018
All rights reserved
Technical information is subjected to
change without notice



Model	Gazelle S1512i-4GF-8GE-PWR
redundancy	<ul style="list-style-type: none"> Support fast recovery from critical errors.
Authentication	
Compliance standard	<ul style="list-style-type: none"> IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3ad, IEEE 802.3z, IEEE 802.3x, IEEE 802.1d, IEEE 802.1w, IEEE 802.1s, IEEE 802.1Q, and IEEE 802.1p IEC61000-4-2 (ESD): ± 8 kV for contact discharge; ± 15 kV for air discharge IEC61000-4-3 (RS-): 10 V/m (80–1000 MHz) IEC61000-4-4 (EFT): power cable: ± 2 kV; data cable: ± 2 kV (5 kHz, 100 kHz) IEC61000-4-5 (Surge): power cable: CM ± 2 kV/DM ± 1 kV; data cable: CM ± 2 kV IEC61000-4-6 (RF Conducted Immunity): 10 V (150 kHz–80 MHz) IEC61000-4-8 (Power Frequency Magnetic Field Immunity): 100 A/m continuous; 1000 A/m, 1s to 3s IEC61000-4-9 (Pulse magnetic field): 300 A/m IEC61000-4-10 (Damped oscillation magnetic field): 30 A/m@1 MHz IEC61000-4-12/18 (oscillatory wave): CM 2.5 kV, DM 1 kV FCC Part 15/CISPR22 (EN55022): Class A IEC61000-6-2 (general industrial standards) IEC60068-2-6 (anti-vibration) IEC60068-2-27 (anti-shock) IEC60068-2-32 (free falling) IEC61850-3 (electrical substation) IEEE1613 (electrical substation) CE, FCC, ROHS, certification by State Grid Corporation of China, certification by China Electric Power Research Institute, and Network Access License for Telecommunications Equipment (Ministry of Industry and Information Technology, P.R.C)

International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing. 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

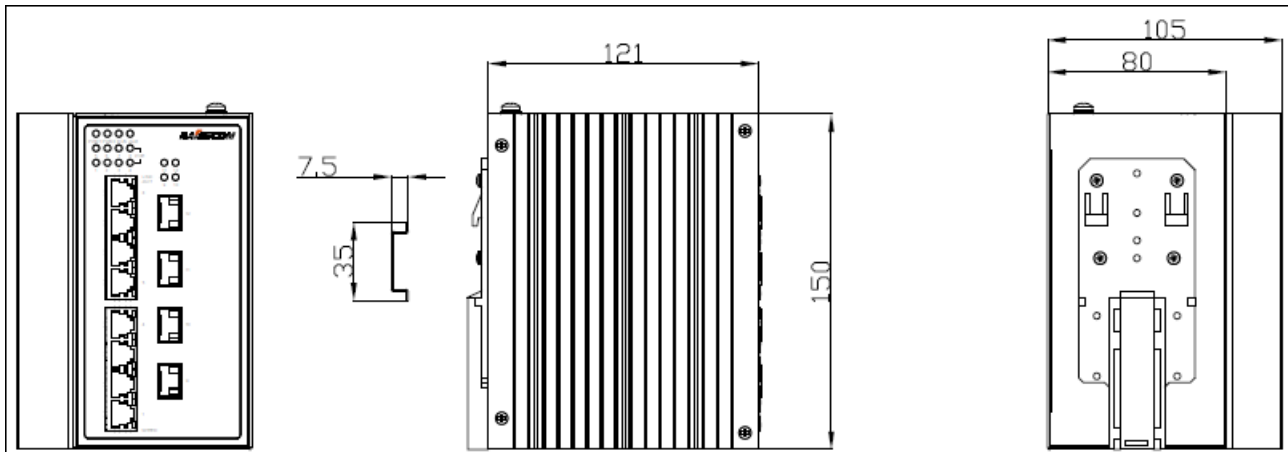
Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2018
All rights reserved
Technical information is subjected to
change without notice



Device dimensions



Ordering information

Model	Version	Description
Gazelle S1512i-4GF-8GE-PWR- DC48	A	<ul style="list-style-type: none">• Four 1000Base-X GE SFP optical interfaces• Eight 10/100/1000Base-T GE electrical interfaces, PoE supported• Dual 48 VDC power inputs
240 W industrial power supply		<ul style="list-style-type: none">• MORNSUN_LI240-10B48• 20.60.11.0022.01

International Headquarters

East-11, Raisecom Building, No.10 Xibeiwang East Road,
Haidian District, Beijing, 100094, China
Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
www.raisecom.com

U.S.A. Headquarters

Address: 3031 N. Rocky Point Drive West Suite 100
Tampa, Florida 33607 USA
Tel: 1-888-816-4808
Email: sales@raisecominc.com

Raisecom Technology Co., Ltd.

Copyright@1999-2018
All rights reserved
Technical information is subjected to
change without notice