

Overview

The GE Security GE-DS-82 managed Ethernet port series offers eight 10/100Mbps Fast Ethernet ports with 2 Gigabit TP/SFP combo ports. The 2 Gigabit TP/SFP combo ports can be either 1000Base-T for 10/100/1000Mbps or 1000Base-SX/LX through SFP (Small Factor Pluggable) interface. These units boast a high-performance wire-speed and switch architecture capable of providing non-blocking switch fabric and throughput as high as 5.6Gbps. Its two built-in Gbe uplink ports also offer incredible extensibility, flexibility and connectivity to the core switch or servers.

Plus, with the PoE in-line power following the standard IEEE 802.3af, the GE-DS-82-PoE is able to power on eight PoE devices at distances up to 100 meters through the 4-pair Cat 5/5e UTP wire. These cost-effective managed switches not only deliver easy Web-based management, but also provide a centralized SNMP application to monitor the status of Switch and traffic per port. Key features include:

- WEB/SSL/Telnet
- 802.1Q/Q-in-Q VLAN
- Multiple Spanning Tree
- IGMP Snooping
- SNMP and 4 RMON groups
- Access Control List
- 802.1X Authentication/RADIUS
- 802.3af PoE (GE-DS-82-PoE)

Affording your current network the opportunity to grow and expand, the GE-DS-82 series provides an advanced WEB and SNMP management interface to meet this demand. With its built-in Web-based management, the GE-DS-82 offers an easy-to-use, platform-independent management and configuration facility. These switches also support standard Simple Network Management Protocol (SNMP) and can be monitored via any standard-based management software.

For efficient management via Web interface, the GE-DS-82 series can be programmed for basic switch management functions such as port speed configuration, Port Trunking, VLAN, Port Mirroring, Rapid Spanning Tree and miscellaneous configuration. Additionally, the firmware includes advanced features such as IGMP snooping, QoS (Quality of Service), broadcast storm and bandwidth control to enhance bandwidth utilization.

The GE-DS-82 series offers comprehensive Access Control List (ACL) for enforcing security to the edge. Its protection mechanisms include a port-based 802.1X user and device authentication. Moreover, the switch provides MAC filter and Static MAC for enforcing security policies to the edge. Administrators can now construct highly secured corporate networks with considerably less time and effort than before.

Standard Features

- 8-Port 10/100TX Fast Ethernet ports with IEEE 802.3af PoE injector
- 2 10/100/1000T TP combo interfaces and 2 mini-GBIC/SFP slots, shared with Port-9 and Port-10 (GE-DS-82)
- Reset button for system management
- 1 RS-232 male DB9 console interface for switch basic management and setup
- Prevents packet loss Flow Control with store-and-forward architecture and runt/CRC filtering to optimize the network bandwidth
- Broadcast/multicast/Unicast storm control
- 8K MAC address table, automatic source address learning and ageing
- Supports VLAN
- Port Mirroring to monitor the incoming or outgoing traffic on a particular port
- 4 priority queues on all switch ports
- Strict priority and Weighted Round Robin (WRR) CoS policies
- Supports QoS and In/Out bandwidth control on each port
- In/Out rate limit control on each port
- Supports IGMP Snooping v1 and v2
- IGMP Snooping v2 fast leave
- Querier mode support for multi-casting
- IEEE 802.1x port-based network access control protocol
- RADIUS users access authentication
- Layer 3 and Layer 4 Access Control List (ACL)
- Source IP-MAC/Port-Binding
- Port Security for Source MAC address entries filtering
- Switch Management Interface
- Built-in Trivial File Transfer Protocol (TFTP) client
- Firmware upgrade via TFTP or HTTP
- Configuration restore/backup via TFTP or HTTP
- Event message logging to remote Syslog server
- Complies with IEEE 802.3af Power over Ethernet End-Span PSE
- Up to 8 IEEE 802.3af devices powered
- Auto detect powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power PoE 802.3af feeding up to 100m

GE-DS-82 Series with 2 Gigabit



GE-DS-82 8-Port 10/100Mbps
with 2 Gigabit SFP Combo
Managed Switch



GE-DS-82-PoE 8-Port 10/100Mbps
with 2 Gigabit SFP Combo
Managed PoE Switch

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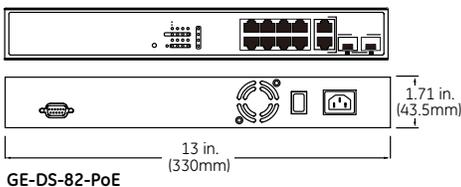
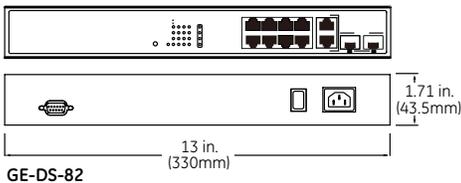
Specifications subject to
 change without notice.

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Ordering Information

GE-DS-82	8-Port 10/100Mbps with 2 Gigabit SFP Combo Managed Switch
GE-DS-82-PoE	8-Port 10/100Mbps with 2 Gigabit SFP Combo Managed PoE Switch

Dimensional Diagram



Specifications

Hardware Specification	
10/100Mbps Copper Ports	8 10/100Base-TX RJ-45 Auto-MDI/MDI-X ports
1000Mbps Copper Ports	2 10/100/1000Mbps RJ-45 Auto-MDI/MDI-X ports
SFP/Mini-GBIC Slots	2 1000Base-SX/LX/BX, shared with Port-9~Port-10
Switch Architecture	Store-and-Forward
Switch Fabric	5.6Gbps/non-blocking
Switch Throughput	4.16Mpps @ 64Bytes
Address Table	8K entries
Share Data Buffer	2 Mbits
Maximum Frame Size	9K Bytes
Flow Control	Back pressure for Half-Duplex IEEE 802.3x Pause Frame for Full-Duplex
LED	GE-DS-82 Power Link/Activity (Green) 100 (Amber) 1000 LNK / ACT (Green) 10/100 LNK / ACT (Amber) GE-DS-82-PoE Power Link/Activity (Green) PoE In-Use (Amber) 1000 LNK / ACT (Green) 10/100 LNK / ACT (Green)
Dimensions (WxDxH)	13 x 6.10 x 1.71 in. 330 x 155 x 43.5mm, 1U height
Weight	2.8 lbs/1.27kg
Reset Button	< 5 sec.: System reboot > 5 sec.: Factory Default

Power over Ethernet	GE-DS-82-PoE
PoE Standard	IEEE 802.3af Power over Ethernet/PSE
PoE Power Supply Type	End-Span
PoE Power Output	Per Port 48V DC, 350mA. Max 15.4 watts
Power Pin Assignment	1/2(+), 3/6(-)
PoE Power Budget	180 Watts
Max. number of Class 2 PD	8
Max. number of Class 2 PD	8

Layer 2 Function	
Management Interface	Console, telnet, Web browser, SSL, SNMPv1, v2c and v3
Port Configuration	Port disable/enable Auto-negotiation 10/100Mbps full and half duplex mode selection Flow control disable/enable
Port Status	Display each port's speed duplex mode, link status and flow control status.
Port Mirroring	TX/RX/Both 1 to 1 monitor
Bandwidth Control	Ingress/Egress rate control: Allow to configure per 128Kbps

VLAN	IEEE 802.1q tagged based VLAN, up to 255 VLANs groups, out of 4041 VLAN IDs Port-based VLAN Q-in-Q tunneling GVRP for VLAN management, up to 128 dynamic VLAN entries Private VLAN Edge(PVE) protected port) with two protected port groups
Link Aggregation	Static Port Trunk IEEE 802.3ad LACP (Link Aggregation Control Protocol) Supports 13 groups of 8-port trunk support
QoS	4 priority queue Traffic classification based on: • Port priority • 802.1p priority • DSCP/TOS field in IP Packet
IGMP Snooping	IGMP (v1/v2) Snooping, up to 256 multicast Groups
Access Control List	IP-based Layer 3/Layer 4 ACL Up to 220 ACL rule entries
SNMP MIBs	RFC-1213 MIB-II RFC-2863 Interface MIB RFC-2665 EtherLike MIB RFC-1493 Bridge MIB RFC-2819 RMON MIB (Group 1, 2, 3,9) RFC-2737 Entity MIB POWER-ETHERNET-MIB (GE-DS-82-PoE)

Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3z 1000Base-SX/LX IEEE 802.3ab 1000Base-T IEEE 802.3x Flow Control and Back pressure IEEE 802.3ad Port trunk with LACP IEEE 802.1d Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1p Class of service IEEE 802.1Q VLAN Tagging IEEE 802.1x Port Authentication Network Control IEEE 802.3af RFC 768 Power over Ethernet (GE-DS-82-PoE) RFC 768 UDP RFC 793 TFTP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP RFC 1112 IGMP version 1 RFC 2236 IGMP version 2

Environmental Specification	
Operating	Temperature: 0~50 degree C Relative Humidity: 20%~95% (non-condensing)
Storage	Temperature: -20~70 degree C Relative Humidity: 20%~95% (non-condensing)

