



Product Data Sheet

GE-DS-242-PoE

24-Port 10/100Mbps Copper Ports + 2 Mini GBIC/SFP Slots Managed PoE Switch

Overview

The UTC Fire & Security GE-DS-242-PoE Ethernet switch features in-line power that follows the standard IEEE 802.3af, enabling it to power on 24 PoE devices at the distance up to 100 meters. This unit also offers 24 10/100Mbps Fast Ethernet ports with 2 Gigabit TP/SFP combo ports (Port-25, 26). The two Gigabit TP/SFP combo ports can be either 1000Base-T for 10/100/1000Mbps or 1000Base-SX/LX through SFP (Small Form-Factor Pluggable) interface.

The GE-DS-242-PoE boasts a high-performance switch architecture that is capable of providing non-blocking switch fabric and wire-speed throughput as high as 8.8Gbps. Its two built-in GbE uplink ports also offer incredible extensibility, flexibility and connectivity to the Core switch or servers.

Designed to grow with your network, the GE-DS-242-PoE provides an advanced WEB and SNMP management interface. With its built-in Webbased management, it offers an easy-to-use, platform-independent management and configuration facility. The GE-DS-242-PoE supports standard Simple Network Management Protocol (SNMP) and can be monitored via any standard-based management software.

Efficient management

For efficient management, via Web interface the GE-DS-242-PoE 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 layer 2 plus features such as IGMP snooping, QoS (Quality of Service), broadcast storm and bandwidth control, to enhance bandwidth utilization.

Providing powerful security, the GE-DS-242-PoE offers comprehensive Access Control List (ACL) for enforcing security to the edge. Its protection mechanisms comprise port-based 802.1X user and device authentication. Moreover, the switch provides MAC filter, Static MAC and IP Security for enforcing security policies to the edge. The administrators can now construct highly secured corporate networks with considerably less time and effort than before.



Standard Features

- 24-Port 10/100Mbps Fast Ethernet ports with PoE Injector
- 2x 10/100/1000Mbps TP combo interfaces and 2 mini-GBIC/SFP slots, shared with Port-25 and Port-26
- 1x RS-232 male DB9 console interface for Switch basic management and setup
- Web-based, telnet, console command line management, IP address security management to prevent unauthorized intruder
- Supports auto-negotiation and half-duplex/full-duplex modes for all 10Base-T/100Base-TX and 1000Base-T ports
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause-frame flow control (full-duplex) groups, out of 4K VLAN IDs
- Layer 3 and Layer 4 Access Control List (ACL), RADIUS users access authentication, MAC Filtering and Source IP-MAC/Port-Binding
- Supports strict priority and Weighted Round Robin (WRR) policies and support QoS and In/Out bandwidth control on each port
- Ingress/egress bandwidth control on each port, IGMP query mode for multicast media application
- Port mirroring to monitor the incoming or outgoing traffic on a particular port
- Supports LLDP to allow switch to advise its identification and capability on the LAN
- Complies with IEEE 802.3af Power over Ethernet End-Span PSE, Up to 24 IEEE 802.3af devices powered
- Auto-detect powered device (PD), Circuit protection prevents power interference between ports
- Supports PoE Power up to 15.4 watts for each PoE port, Remote power feeding up to 100m



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Specifications

Hardware Specifications

- 24x 10/100Base-TX RJ-45 with Auto-MDI/MDI-X function for each port
- 2x 10/100/1000Base-TX RJ-45 ports (shared with SFP interfaces)
- 2x 1000Base-SX/LX/BX SFP/Mini-GBIC interfaces, shared with port-25-Port-26
- Switch Architecture : Store-and-Forward
- Switch Fabric : 8.8Gbps/non-blocking
- Switch Throughput : 6.547Mpps @64Bytes
- Address Table : 8K entries
- Share Data Buffer : 512KBytes
- Maximum Frame Size : 9KBytes
- Flow Control : Back pressure for Half-Duplex and IEEE 802.3x Pause Frame for Full-Duplex
- LED : Per unit: Power (Green), FAN Alarm
- LED : 24x 10/100: Link/Activity (Green)
- LED : 2x 1000T: LNK/ACT (Green)
- LED : PoE: PoE In-Use (Amber)
- Console Interface : RS-232 male DB9 console interface
- Dimensions (W) x (D) x (H) : 440 x 265 x 44.5mm, 1U height
- Weight : 3.6kg
- Reset Button : < 5 sec.: System reboot, > 5 sec.: Factory Default

Power over Ethernet

- PoE Standard : IEEE 802.3af PSE (Power Sourcing Equipment)
- PoE Power Supply Type : End-Span
- PoE Power Output : Per port 48V DC, Max. 15.4 watts, 350mA
- Power Pin Assignment : 1/2(+), 3/6(-)
- Max. number of Class 2 PD / class 3 PD : 24 / 12

Layer 2 Function

- Management Interface : Console, Telnet, Web Browser, SNMP v1, v2c
- Port Configuration : Port disable/enable, Auto-negotiation 10/100Mbps full- and half-duplex mode selection, Flow control disable/enable, Bandwidth control on each port.
- Port Status : Display each port's speed duplex mode, link status, Flow control status, Auto negotiation status, trunk status
- VLAN : Port-Based VLAN, up to 255 VLAN groups out of 4041 VLAN ID's, IEEE 802.1q Tagged Based VLAN
- Spanning Tree : IEEE 802.1d Spanning Tree, IEEE 802.1w Rapid Spanning Tree
- Link Aggregation : Static Port Trunk, IEEE 802.3ad LACP (Link Aggregation Control Protocol), Supports 13 groups of 8-Port trunk
- QoS : Traffic classification based on : • Port Number • 802.1Q Tag • 802.1p priority • IP DSCP/TOS field in IP Packet
- IGMP Snooping : v1 and v2, 256 multicast groups and IGMP querier support
- Port Mirror : RX / TX / Both, 1-to-1 mirroring

- Security : IEEE 802.1x Port-Based Network access control, Port Security, Static MAC, MAC Filtering, MAC / IP Binding
- SNMP MIBs : RFC-1213 MIB-II, RFC-2863 Interface MIB, RFC-2665 EtherLike MIB, RFC-1493 Bridge MIB
- SNMP MIBs : RFC-2819 RMON MIB (Group 1, 2, 3, 9), RFC-2737 Entity MIB, POWER-ETHERNET-MIB

Environmental

- Operating : Temperature 0°C ~ +50°C; Relative Humidity 20%~95% (non-condensing)
- Storage : Temperature -20°C ~ +70°C; Relative Humidity 20%~95% (non-condensing)

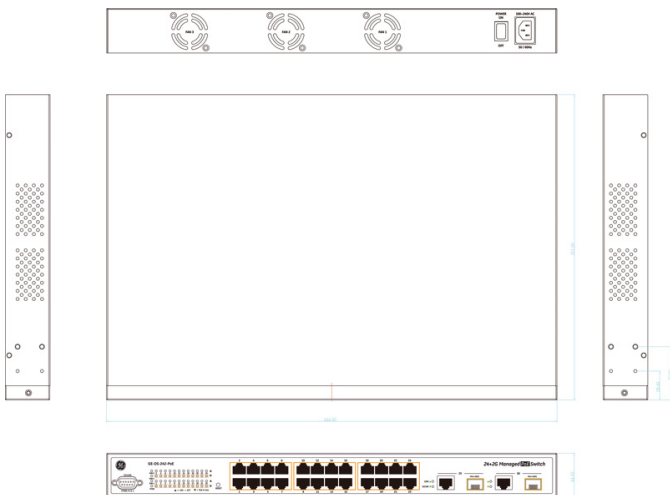
Electrical

- Power Requirement : 100~240V AC, 50-60 Hz
- Power Consumption : 419 Watts maximum

Standards Conformance

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3z Gigabit SX/LX
- IEEE 802.3ab Gigabit 1000Base-T
- IEEE 802.3af Power over Ethernet
- IEEE 802.3x Flow Control and Back Pressure
- IEEE 802.3ad: Port trunk with LACP
- IEEE 802.1d Spanning Tree Protocol
- IEEE 802.1w Rapid Spanning Tree Protocol
- IEEE 802.1p Class of Service
- IEEE 802.1Q VLAN Tagging
- IEEE 802.1x Port Authentication Network Control
- Regulation Compliance : FCC Part 15 Class A, CE

Diagram



Ordering Information

GE-DS-242-PoE

24-Port 10/100Mbps Copper Ports + 2 Mini GBIC/SFP Slots Managed PoE Switch (Full PoE Power) - Accepts 1000Base-LX/SX SFP only

SFP1000LX-10KM

SFP-Port 1000Base-LX Mini-GBIC Module - 10Km - SM
SFP1000SX-220

SFP-Port 1000Base-SX Mini-GBIC Module - 220m - MM
SFP1000LX-70KM

SFP-Port 1000Base-LX Mini-GBIC Module - 70Km - SM
SFP1000LX-30KM

SFP-Port 1000Base-LX Mini-GBIC Module - 30Km - SM

