

# IES2228F

24 SFP + 2 GTX + 2 GC Ethernet Switch

## Features

1. 24 10/100M Fast Ethernet ports(SFP slots),2×10/100/1000M TX,2×1000M TX/SFP combo ports,1 CONSOLE, and standard AC power supply
2. 36 Gbps switch fabric, hardware routing, wire-speed L2 forwarding rate: 9.5 Mpps
3. Powerful ACL supports L2-L7 data filtering
4. Auto-detection and restraining of broadcast storm, IGMP snooping, effectively restrict broadcast flooding
5. Management via CONSOLE port, Web, SNMP, Telnet, etc
6. Support Broad Director, HP Open View, Cisco Works 2000



## Introduction

3onedata IES2228F is a modularized hi-performance workgroup-level or enterprise-scale switch, with 24 Fast Ethernet ports(SFP slots),plus maximum 4 gigabit ports. IES2228F can connect all (Fast) Ethernet devices so that your investment is protected. The hi-speed connection it provides among workgroups

can boost the capability of server clusters, and solves the bottleneck caused by increasing users and limited bandwidth, making network resources more readily available to you. More importantly, all of the advantages are brought to you by 3onedata at low costs and with easy maintenance.

## Features

### Performance

1. 36 Gbps switch fabric, hardware routing, wire-speed L2 forwarding rate: 9.5 Mpps
2. 80-km transfer by Gigabit optical fiber, direct connection to WAN

### Security and reliability

1. IEEE 802.1x and other methods for user authentication
2. Powerful ACL supports L2-L7 data filtering
3. QinQ support. Double VLAN security

### Easy maintenance

1. Automatic recognition for straight-through or cross-over cables

2. Stackable physically and through cluster technology. Central management with unified IP address saves IP addresses
3. Management via CONSOLE port, Web, SNMP, Telnet, etc.
4. Support Broad Director, HP Open View, Cisco Works 2000

### Traffic and broadcast control

1. Auto-detection and restraining of broadcast storm, IGMP snooping, effectively restrict broadcast flooding
2. Full- and half- duplex traffic control
3. Ethernet port rate limiting with 1 M step size
4. QoS support
5. Jumbo frame

## Specification

### Interface

Port & Slot: 24×100M(SFP slots), 2×10/100/1000M TX, 2×GSFP/TX combo ports

Console Port :RS-232(RJ45 connector)

LED Indicators: Power, system, link, activity, 10/100M

### Switch Properties

Support standard: IEEE 802.1d Spanning Tree Protocol, IEEE 802.1p Class of Service, IEEE 802.1q tagged VLAN,IEEE 802.3x Flow control, IEEE 802.3ad Link aggregation

Network management standard: RFC 1213 MIB II,RFC 1493 Bridge MIB,RFC 1643 Ether-Like MIB

Processor: MPC 50MHz

FLASH: 4 MB

Memory: 64 MB

Switch Fabric: 36 Gbps

Forwarding Rate: All wire-speed forwarding and filtering

Switching Mode: Store-and-forward

MAC address Table Size: 8 K

Queuing Buffer: 64 MB



Jumbo frame: 2048

## Technology

Spanning Tree: IEEE 802.1D STP, IEEE 802.1w RSTP, 802.1s  
MSTP

VLAN: Port-based VLAN, 802.1Q tag VLAN, Private VLAN,  
GVRP dynamic VLAN configuration, QinQ

Traffic Control: Back pressure at half-duplex, 802.3x at full-duplex,  
CAR support, 64K step size for 100-M ports, 8 M step size  
for Gigabit ports

Storm Control: Stop sending at threshold to restrict  
broadcast/multicast/unicast storms

Multicast Control: IGMP snooping

DHCP: DHCP snooping, DHCP option 82, IP source guard

Port Trunking: Up to 6 groups with up to 8 ports per group, dynamic  
LACP or static aggregation

Port Mirroring: Supported. Can be based on flow classification

Clustering: Up to 256, manageable through single IP

Security: IEEE 802.1x port-based user authentication

Port Security

Hardware support for IP ACL, MAC ACL, VLAN ACL

Remote authentication through RADIUS

User privilege classification and password protection

QoS: Head Of Line (HOL) blocking prevention mechanism

4 dispatching queues per port, mapping the 8 priority queues in

802.1p

Best Effort Service

Differentiated Service

Strict Priority

Weighted Round Robin

First Come First Serve

TOS re-tagging

RTS

Network Management: SNMP v1/v2,RMON (Group 1, 2, 3,  
9),Telnet,Command Line Interface  
(CLI),Web interface,Support network  
management tools suite: Broad  
Director,NTP,SSH,LLDP

Software Upgrade: TFTP/FTP

Configuration Upload/download: TFTP/FTP

## Environment, Power and Dimension

Temperature: Operating: 0 ~ 50°C, non-operating: -40 ~ 70°C

Humidity: 0 ~ 90% (no condensing)

Power Consumption: 28 W (max.)

Power Input: AC 100 ~ 240 V, 47 ~ 63 Hz, 1A/230V

Dimensions (L×W×H) : 442mm×225 mm×44 mm

Weight: 6.6kg

**Warranty: 5 years**

**Approvals: FCC, CE, RoHS approvals**

