

# IES3424F

24 SFP + 2 GTX + 2 GC Ethernet Switch

## Features

1. 24 100M SFP slots, 2 1000M TX, 2 1000M TX/SFP combo
2. 36Gbps switch fabric, hardware routing, wire-speed L3 forwarding rate:9.6Mpps
3. Powerful ACL supports L2-L7 data filtering
4. Intelligent forwarding, complete defense against viruses like 'Code Red' or 'Blaster'
5. Support RIP v1/v2, OSPF v2, BEIGRP, BGP v4 and many other dynamic routing protocols
6. Management via CONSOLE port, Web, SNMP, Telnet, etc
7. Support Broad Director, HP Open View, Cisco Works 2000



## Introduction

3onedata IESS3424F is the next-generation hi-performance L3 Ethernet switch. It has advanced architecture, 36 Gbps switch fabric, and 9.6 Mbps L3 forwarding rate. Its hardware wire-speed L3

switching capability provides a powerful, multi-layered solution not only for enterprises, but also for Internet Service Providers (ISPs) and telecom carriers.

## Features

### Excellent performance

1. 36 Gbps switch fabric, hardware routing, wire-speed L3 forwarding rate:9.6Mpps
2. High port density. 24 100M ports and up to 4 Gigabit ports
3. 80km transfer by Gigabit optical fiber, direct connection to MAN backbone networks

### Security and reliability

1. IEEE 802.1X
2. Powerful ACL supports L2-L7 data filtering
3. Intelligent forwarding, complete defense against viruses like 'Code Red' or 'Blaster'
4. RPS power hot standby
5. QinQ 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, restraining of broadcast storm and IGMP snooping effectively restrict broadcast flooding
2. Full-and half-duplex traffic control
3. Ethernet port rate limiting with 64K step size
4. IP multicast and QoS support
5. Jumbo frame

### Routing protocols

1. Static routing
2. Support RIP v1/v2, OSPF v2, BEIGRP, BGP v4 and many other dynamic routing protocols
3. Support PIM-SM/DM

## Specification

### Interface

Port: 24 100M SFP slots, 2 1000M TX, 2 1000M TX/SFP combo  
 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  
 Standard of IP routing protocol: RFC 1058 RIP,  
 RFC 1723 RIP v2, RFC 1583 OSPF v2



Network management standard: RFC 1157 SNMP v1/v2, RFC 1213  
MIB II, RFC 1157 RMON 1,2,3,9

Processor: MPC 266MHz

Memory: 128MB(up to 512MB)

Switch Fabric:36G

L3 Forwarding Rate:9.6Mbps, all wire-speed, with filtering

Forwarding Mode: Store-and-forward

MAC Address Table Size: 16K

Jumbo frame: 16383

Queuing Buffer:64 MB

Hardware Routing Table Size:4K

L2 multicast group:1K

L3 multicast group:1K

802.1 Q VLAN:1~4094,partition at will

EPROM:1M Bytes

Flash Memory: 8M Bytes

SDRAM: 128Mbytes

## Technology

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

VLAN: Port-based VLAN, 802.1Q tag VLAN, VLAN  
Stacking(QinQ),Super VLAN,Private VLAN, GVRP  
dynamic VLAN configuration

Traffic Control: Back pressure at half-duplex, 802.3x at full-duplex,  
CAR support, 64K step size

Storm Control: Broadcast/multicast/unicast storms

Multicast Control: IGMP snooping

Port Trunking: Up to 32 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

Unitcast: Static, RIP v1/v2, OSPF v2, BEIGRP (compatible with  
Cisco EIGRP), BGP v4, Intelligent forwarding to defend  
against virus attacks and illegal access

Multicast: IGMP v1/v2/v3, PIM-SM/DM

Proxy: Proxy ARP,DNS Proxy

DHCP: DHCP Server/Client/Relay, DHCP option 82, IP Source  
Guard

NAT: Static or dynamic NAT

Security: IEEE 802.1x port-based user authentication

QinQ double VLAN Security

Port Security

Hardware support IP ACL,MAC ACL,VLAN ACL

Hardware support for port-based user authentication by  
combinations and bandings of port, IP address, and MAC address

Remote authentication through RADIUS

User privilege classification and password protection

IP Source Guard

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

## Working Environment, Power,Dimensions

Operating temperature:0 ~ 60°C, 10 ~ 85% (no condensing)

Storage temperature: -40 ~ 80°C, 5 ~ 95% (no condensing)

Power Consumption: 30W (max)

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

Dimensions(L×W×H):442mm×385mm×44mm

**Warranty: 5 years**

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

