

# IES2448C

48 TX + 2 GTX + 2 GSFP Ethernet Switch

## Features

1. 48 10/100M Fast Ethernet ports, 2x10/100/1000M TX, 2x1000M SFP Slots' 1 CONSOLE, and standard AC power supply
2. 36 Gbps switch fabric, hardware routing, wire-speed L2 forwarding rate: 13.1 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 IES2448C is the next-generation hi-performance L2 Ethernet switch with 48 Fast Ethernet ports, plus 4 gigabit ports. It has advanced architecture, 36Gbps switch fabric, and 13.1 Mpps

forwarding rate. Its hardware wire-speed switching capability provides a powerful, multi-layer solution not only for enterprises, but also for Internet Service Providers (ISP's) and telecom carriers.

## Features

### Performance

1. 36 Gbps switch fabric, hardware routing, wire-speed L2 forwarding rate: 13.1 Mpps
2. High port density. 48 Fast Ethernet ports, 2 Gigabit Ethernet ports, 2 Gigabit SFP slots
3. 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. Intelligent forwarding, complete defense against viruses like 'Code Red' or 'Blaster'
4. RPS power hot standby
5. 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. L2 multicast and QoS support
5. Jumbo frame

## Specification

### Interface

Port & Slot: 48x10/100M TX, 2x10/100/1000M TX, 2xGSFP slots

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

Stacking: Hardware stack upto 16, software stack up 32

Switch Fabric: 36 Gbps

Forwarding Rate: 13.1 Mpps

Switching Mode: Store-and-forward

MAC address Table Size: 8 K

L2 multicast groups Table: 4K

Queuing Buffer: 64 MB



802.1Q VLAN:1~4094,partition at will

Jumbo frame: 2K

## Technology

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

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

Traffic Control: Back pressure at half-duplex, 802.3x at full-duplex,  
CAR support, 1M step size for 100M ports, 8 M step size for  
Gigabit ports

Storm Control: Broadcast, multicast, DLF

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

MPLS Martini

QinQ double VLAN security

Port Security

Hardware support for IP ACL, MAC ACL, VLAN ACL

Port-based user authentication by combinations and

bandings of port, IP address, and MAC address

Web user authentication

Remote authentication through RADIUS,TACACS+

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

WRED,WFQ,SP, and FIFO queuing algorithms

Best Effort Service

Differentiated Service

Strict Priority

Weighted Round Robin

First Come First Serve

TOS re-tagging

RTS

DHCP:DHCP snooping, DHCP option 82

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,PDP(compatible with

Cisco CDP)

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: 40 W (max.)

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

Dimensions (L×W×H) : 442mm×316 mm×44 mm

Weight: 6.6kg

**Warranty: 5 years**

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

