

# IES2000 SERIES

## Layer-3 Rack-mounted Industrial Switch



Wide-range working  
temperature 800,000  
hours MTBF



Advanced Hardware  
Architecture and  
Industry-leading Port  
Density



Varied Service  
Characteristics Versatile  
IPv6 Solution Complete  
Security Mechanism



IP40 protection 6KV  
lightning protection

## Product Overview

BDCOM IES2000 series, based on the brand-new high-performance hardware and BDROS software system of BDCOM's independent intellectual property rights, supports rich Layer-2/Layer-3 routing and industrial ring network protocols. IES2000 series adopts die-casting aluminum shell and standard 19-inch rack-mounted installation, and provides redundant wide-voltage industrial power supplies. With the reliable industrial Ethernet ring technology, its hardware-based algorithm can ensure node self-healing time less than 5 milliseconds, and the ring network self-healing time less than 50 milliseconds (typical value).

BDCOM IES2000 series, with fanless design, low power consumption, wide temperature and wide voltage in compliance with strict industry standards, can adapt to harsh environment requirements for EMC, anti-vibration and shock-proof capabilities, IP40 protection level. IES2000 series can be widely used in energy, transportation, industrial production, environmental protection, military industry.

## Product Characteristics

Lightning protection level: 6KV. IP40 protection, industrial fanless thermal conduction.

Supports dual 220V wide-voltage industrial power input (DC model is optional). Business ports, management ports, power input terminals, and relay alarm output are located on the front panel, complying with industrial operation specifications.

Supports STP/EAPS/ERPS, Supports node self-healing time less than 5 milliseconds, and ring network self-healing time less than 50 milliseconds (typical value). Supports layer-3 static routing, dynamic routing (RIP, OSPF), Virtual Router Redundancy Protocol (VRRP). Supports virtual stacking.

Supports to form a self-healing ring between any two ports, and supports multiple independent self-healing rings. Provides Data Leakage Prevention (DLP), to quickly recover from network failures.

Supports simple network management protocol (SNMP) and cloud-based operating platform (Pallas). The mean time between failures (MTBF): more than 800,000 hours.

# Model Lists



### IES2000-5024T8C4X

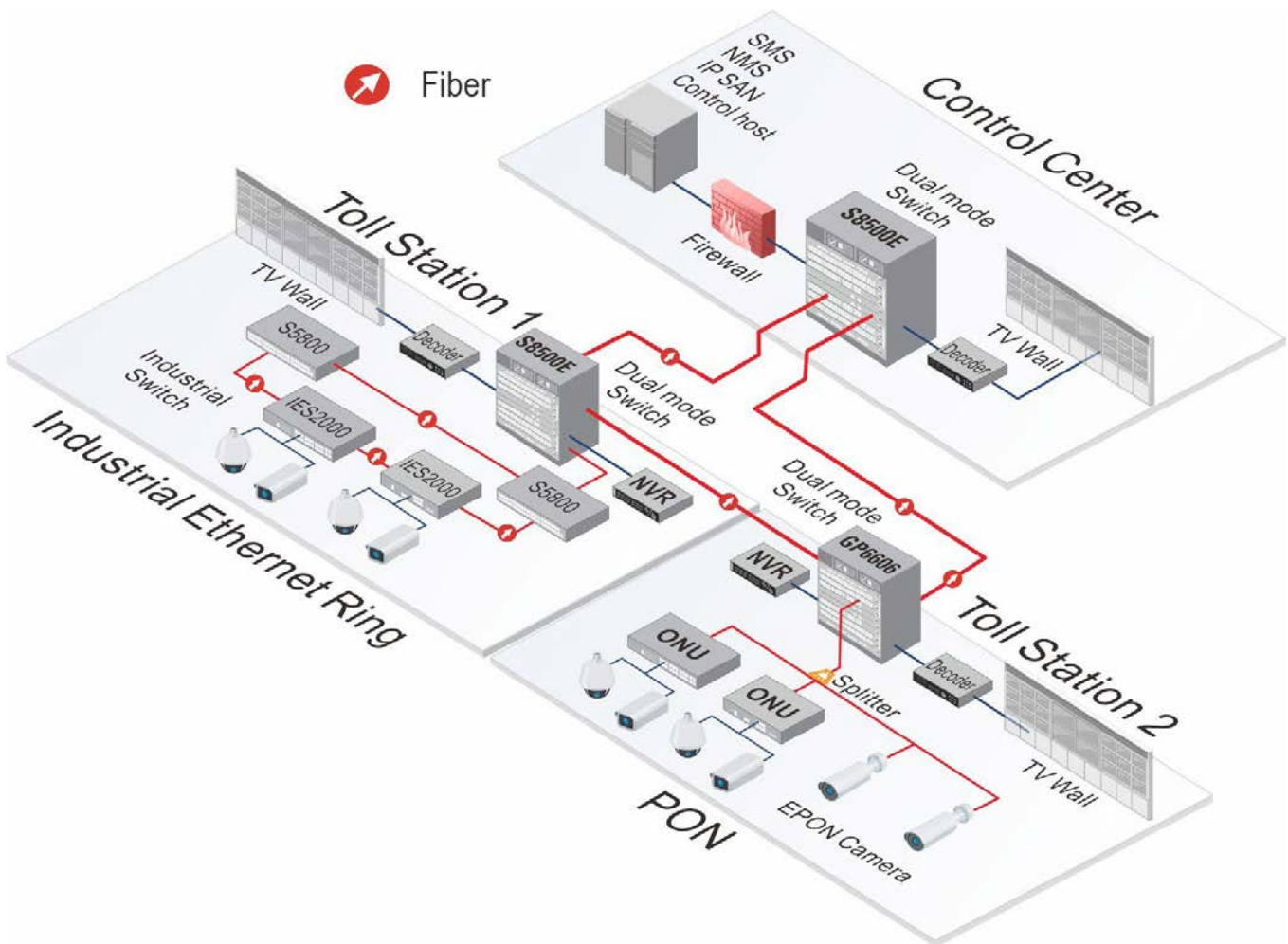
- 16-Port Gigabit RJ45
- 8-Port Gigabit RJ45/SFP Combo
- 4-Port 10G/GE SFP+



### IES2000-5024S8C4X

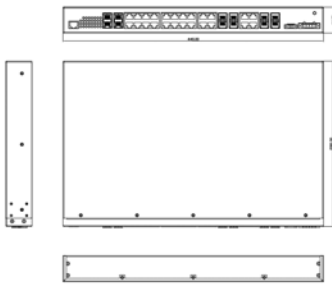
- 16-Port Gigabit SFP
- 8-Port Gigabit RJ45/SFP Combo
- 4-Port 10G/GE SFP+

# Application Diagram

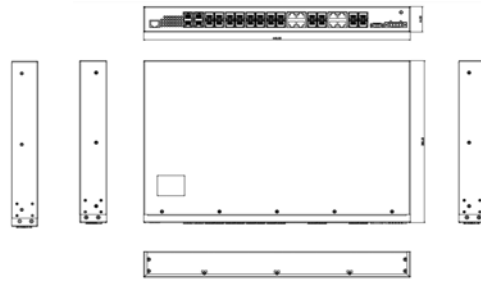


# Panel Diagram

**IES2000-5024T8C4X**



**IES2000-5024S8C4X**



## Product Specifications

Item		IES2000-5024T8C4X	IES2000-5024S8C4X
Gigabit Interface	RJ45	16	8
	SFP	8	16
10G/GE SFP+		4	4
Console (RJ45)		1	1
Backplane (Gbps)		128	128
Forwarding rate (Mpps with 64 bytes)		96	96
Chassis	Dimensions (WxDxH)(mm)	440x280x44	440x280x44
	Weight (KG)(empty)	2.7	3
Package	Dimensions (WxDxH)(mm)	576*448*94	576*448*94
	Weight(KG)	3.5	3.8
Power consumption	no-load	15.5W	20W
	full-load	33.25W	38.6W
Power supply		Dual AC or DC 100~240V	Dual AC or DC 100~240V
Total output BTU (1000BTU/H=293W)		113.48	131.74
MTBF(H)		>800,000	>800,000
Forwarding mode		Store-forward	Store-forward
Flash (MB)		16	16
DRAM (MB)		256	256
MAC		16K	16K
Buffer size(Mb)		12	12
Jumbo frame		9K	9K
Total SVI		64	64

# Features

## VLAN

- 4K Active VLAN, QinQ & Selective QinQ, GVRP, Private VLAN, Voice-VLAN

## Spanning Tree

- 802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)
- BPDU guard, root guard and loopback guard

## Multicast

- IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter

## IP

- Static route, RIP, OSPF
- IPv4/v6 dual stack

## Ipv6

- ICMPv6, DHCPv6, ACLv6 and Telnet
- IPv6 neighbor discovery, Path MTU discovery
- MLD V1, MLD snooping
- IPv6 Static Routing, RIPng, OSPFv3
- Manual tunnel, ISATAP tunnel, 6 to 4 tunnel

## QoS

- CAR, HQoS, MAC/IP/TCP/UDP/VLAN/ COS/ DSCP/ TOS based QoS, 802.1P/ DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED, flow monitoring and traffic shaping

## Security

- Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky
- DAI & IP source guard, PPPoE+,
- IEEE 802.1x, AAA, Radius and BDTacacs+
- L2/L3/L4 ACL flow identification and
- Port security, IP+MAC+port binding filtration Anti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc.
- Broadcast/multicast/unknown unicast storm-control
- MD5, SHA-256, RSA-1024, AES256, etc.

## Virtualization

- Support BDCOM Virtual Stacking System (BVSS)
- up to 16 stacking units

## DHCP

- DHCP server/relay/client
- DHCP snooping/option82

## Reliability

- Static/LACP link aggregation, Interface backup
- EAPS and ERPS
- ISSU uninterrupted system upgrade
- BVSS, up to 16-units per stack
- VRRP
- UDLD

## Management

- Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON
- TFTP, FTP, SFTP
- NTP
- ZTP
- SPAN, RSPAN
- Dying gasp\*

## Environment

- Operating temperature/ humidity: -40~85°C , 10%-90% non-condensing
- Storage temperature/humidity: -40~85°C , 5%-95% non-condensing

## Accessories

- Power cord, rackmount kits, console cable

# Ordering Information

Item	Description
<b>IES2000 Series</b>	
IES2000-5024T8C4X	16-Port Gigabit RJ45 + 8-Port Gigabit RJ45/SFP Combo + 4-Port 10G SFP+ L3-lite Stackable Managed Industrial Switch (supports industrial ring protection protocol, operating temperature: -40~85°C; dual industrial AC power input (90~260V), rack –mounted installation)
IES2000-5024S8C4X	16-Port Gigabit SFP + 8-Port Gigabit RJ45/SFP Combo + 4-Port 10G SFP+ L3-lite Stackable Managed Industrial Switch (supports industrial ring protection protocol, operating temperature: -40~85°C; dual industrial AC power input (90~260V), rack –mounted installation)

Copyright © Shanghai Baud Data Communication Co., LTD.2023. All Rights Reserved.

This document is BDCOM Public Information. BDCOM reserves the right to alter, update and otherwise change the information contained in the document from time to time.

