Item	Industrial Gigabit Ethernet Switch
Series No.	IFS3400
Description	4 x 10/100/1000Base-T to 1000Base-FX

Overview

The IFS3400 series is a high performance and cost-effective Industrial Gigabit Ethernet Switch that meets the high reliability requirements of industrial network operations. It is designed to extend the distance of a network by converting Gigabit Ethernet data between twisted pair cabling and multi-mode or single-mode fiber-optic cabling.

The IFS3400 features 1x 1000Base-FX fiber port and 4 x 10/100/1000Base-T twisted-pair port. The fiber optic port features SC connector and operating distance from 550 to 120km depending on different Model. The twisted-pair port has an RJ-45 connector with a maximum operating distance of 100m. IFS3400-F provides one SFP slot for any MSA-complaint pluggable 1.25G SFP transceivers.

The IFS3400 Industrial Gigabit Ethernet Switch is designed to stand up to extreme temperature, surges, vibrations, and shocks found in industrial automation, government, military, oil & gas, mining and outdoor applications, such as traffic management, oil and gas pipelines.
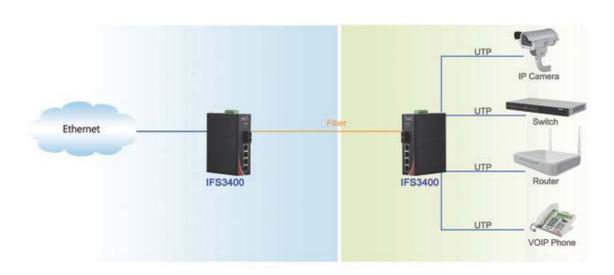
The IFS3400 series enables real-time deterministic network operation, requires no configuration and will instantly operate as soon as you power it up. Additionally, they can be installed by DIN-rail or wall-mounted, allowing users to deploy any mix of network conversions required.

Many Backbone switch products now support the industry-standard IEEE802.1Q specification for VLANs that send extra-long data packets on the network. The IFS3400 series converters are fully compatible with these long packets, enabling them to be used in modern networks.

Features

- 4 x 10/100/1000Base-T Port to 1 x 1000Base-FX
- 1*9 fixed fiber module or SFP slot optional
- RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-forward
- Max packet size: 2048bytes
- Wide-range redundant power design (12~56VDC)
- Support wide operating temperature (-40 ˚C ~ +85 ˚C)
- Power polarity reverse protect
- Overload current resettable fuse present
- IP-40 protection
- Provide EFT protection for Power line
- Support Ethernet ESD protection
- DIN-Rail and Wall-Mounted Installation
- Low power consumption

Applications

Technical Specifications

Standards	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-SX/LX standards IEEE802.3x Flow control and back pressure IEEE802.1d Spanning Tree, IEEE802.1Q VLANs
Performance	Processing Type : Store and Forward MAC Table Size: 1024bit Buffer Space: 1Mbit Back bandwidth: 12G Time Delay: ＜20μs
Copper Port	Data Rate: 10/100/1000M Connector: RJ45 x 4 Distance: 100m
Fiber Port	Data Rate: 1.25G Connector: SC as default, FC/ST/SFP optional Distance: MMF=550m/2km; SMF=20/40/80/100/120km Bi-Di=20/40/80/100/120km
LED indicators	PWR1: ON=Power Connected PWR2: ON= Power Connected FL/A: ON=Fiber Connected; Active=Data Transmitting TL/A: ON=Copper Connected; Active= Data Transmitting
Power	Input Voltage: 12~56 VDC, redundant power inputs Power Consumption: <5W Protection: Overload Current; Reverse Polarity Connector: Terminal Block
Environment	Operating Temperature: -40 ˚C ~ +85 ˚C Storage Temperature: --40 ˚C ~ +95 ˚C Relative humidity: 5-95% (no condensation)
Physical Characteristics	Housing: IP40 Protection, Aluminum Alloy Installation: DIN-Rail , Wall-Mounted Dimension: 138*107*45mm Weight: 0.50kg

EMS Standards

IEC61000-4-2(ESD): +8KV (Contact Discharge), +15KV (Contact Discharge)

IEC61000-4-3(RS): 10V/M (80-1000MHZ)

IEC61000-4-4(EFT): power cables +4KV, signal cables +2KV

IEC61000-4-5(Surge): power cables +4KV CM/+ 2KV DM, signal cables + 2KV

IEC61000-4-6(RF coupling): 3V (10KHZ-150KHZ), 10V (150KHZ-80MHZ)

IEC61000-4-8(Power Frequency Magnetic Field): 100A/M COUNT 1000A/M 1S TO 3S

IEC61000-4-12/18(Damped Oscillatory Wave): 2.5KV CM, 1KV DM

IEC61000-4-10(conducted disturbances): 30A/M

IEC61000-4-16(common mode): 30V COUNT 300V，1S

IEC61000-6-2(Electromagnetic compatibility)

IEC61850-3(electrical substation)

IEEE1613 (electric power substations)

EN50121-4(Rail Traffic)

Order Information

Model No.	Description
IFS3400-F	10/100/1000M ,SFP Slot
IFS3400-M05	10/100/1000M, MMF 850nm, SC,550m
IFS3400-M02	10/100/1000M, MMF,1310nm, SC,2km
IFS3400-S20	10/100/1000M, SMF,1310nm,SC,20km
IFS3400-S40	10/100/1000M SMF,1310nm,SC,40km
IFS3400-A20	10/100/1000M Bi-di TX1310/RX1550nm,SC,20km
IFS3400-B20	10/100/1000M Bi-di TX1550/RX1310nm,SC,20km
IFS3400-A40	10/100/1000M Bi-di TX1310/RX1550nm,SC,40km
IFS3400-B40	10/100/1000M Bi-di TX1550/RX1310nm,SC,40km
Note: 1. Power supply provided by user or ordered additionally 2. SC connector as default, FC/ST as request	