



# Your single source for network transmission solutions.

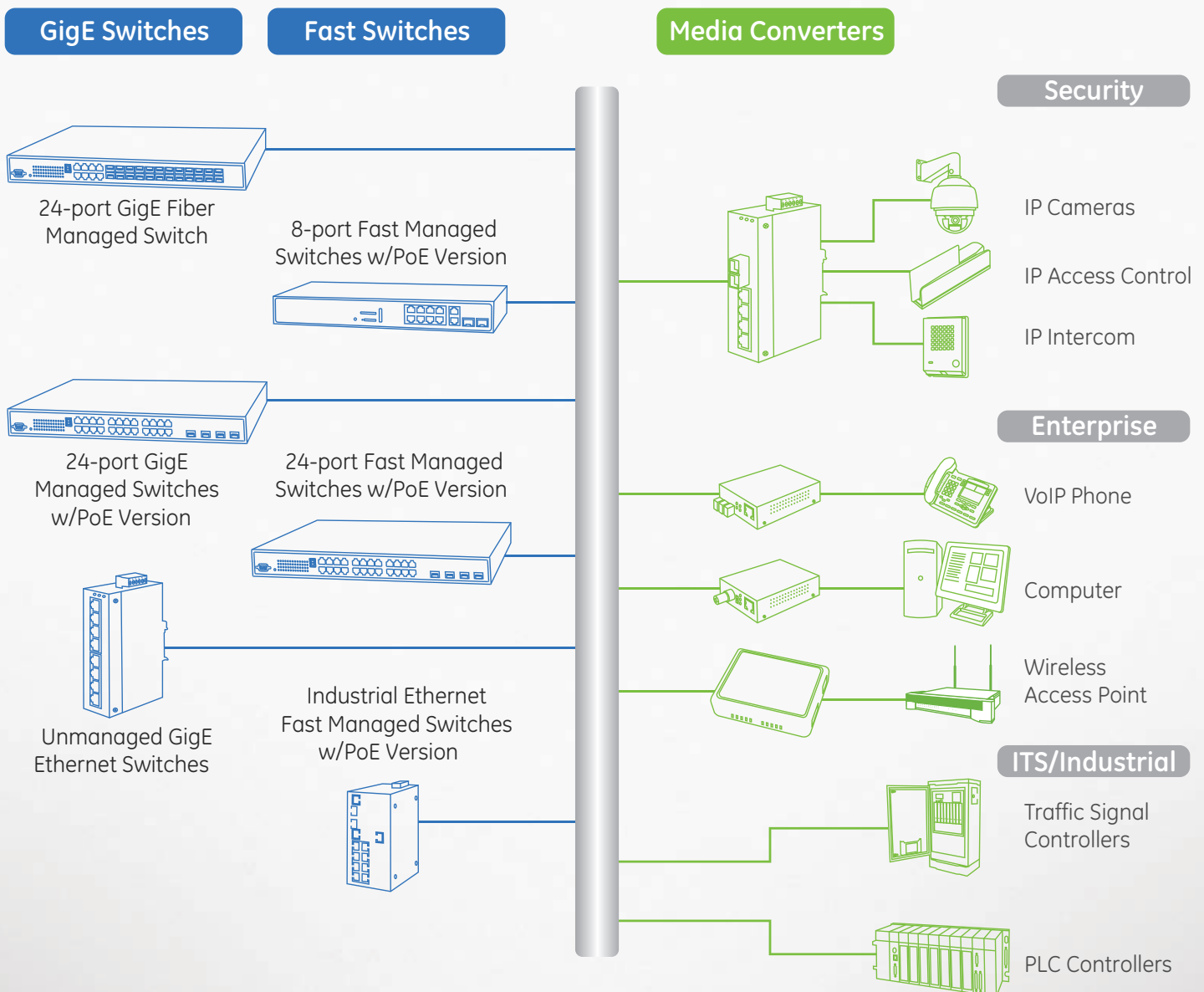
Robust performance and complete flexibility to meet all your current and future transmission needs.



# One platform, unlimited possibilities.

GL's network solution products are now IFS. As the security, industrial and ITS markets continue to transition from analog to IP technology, companies are looking for a single comprehensive source for their migration needs.

IFS is that source. More than just discrete products, IFS transmission solutions provide a complete communication platform that combines powerful hardware and simple, intuitive Web Services to meet all your existing and future physical transmission needs.



# Switch technology designed to meet the demands of modern network environments

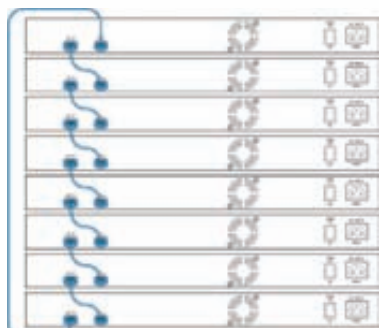
IFS continues our long-standing reputation of offering robust transmission equipment that is easy to install. The new line of IFS network switches provides enterprise-class features and is engineered with high bandwidth, isolated PoE ports, integrated SFP fiber ports and browser-based Web Services that deliver powerful capability while being easy to use. These switches provide Layer 2+ functionality and support industry network standards for full interoperability with other IEEE-compliant equipment.

IFS also provides a comprehensive line of Industrial Ethernet equipment designed for installation in harsh and demanding environments. These switches offer many features of our enterprise switches, yet in a more industrial design. Unique to these products are DIN-rail mounting options, redundant power, IFS' industrial fail-safe ring topology and a wide operating temperature range.



## 24-Port Gigabit Ethernet Stackable Managed Switches

The IFS 24-port Gigabit Ethernet Stackable Switch Series are Layer 2+ fully managed enterprise-class switches designed for today's high-demand GigE backbones. These best-in-class Gigabit switches are engineered with a high-performance 68Gbps non-blocking switch fabric capable of handling high data throughput with no risk of packet loss. The PoE version provides 14 full powered isolated PoE ports. The fiber backbone switch provides optimization of optical networks by providing 24 SFP ports. Integrated and intuitive browser-based Web Services offer real-time programming, status, and management of the switch. Support for IP video includes the ability to configure up to 255 multicasting groups with full IGMP snooping and query.



Switches are stackable up to 16 units

### MODELS:

GE-DSSG-244: 24-Port GigE Stackable Fiber Managed Switch  
24-Port GigE + 8 Shared RJ-45 GigE ports

GE-DSSG-244-POE: 24-port GigE Stackable PoE Managed Switch  
24-Port GigE (14 w/PoE) + 4 Shared GigE SFP ports

### Features

- Layer 2+ fully managed GigE switch
- PoE Switch – 24 GigE ports (14 full powered isolated PoE ports) + 4 shared GigE SFP (fiber) ports
- Fiber Switch – 24 GigE SFP (fiber) ports + 8 shared GigE RJ45 ports
- IEEE compliant for full network interoperability
- High-performance non-blocking switch fabric capable of up to 68Gbps throughput
- Simple and intuitive browser-based Web Services
- Supports up to 255 multicasting groups with full IGMP snooping and query
- Stackable up to 16 units providing up to 384 ports with one network IP address
- Up to 4Gbps backbone via link aggregation with multiple redundant backup path options for added protection



### Small-Format Pluggable Transceiver Modules

IFS offers a full line of small-form pluggable (SFP) fiber transceiver modules for use in all IFS Ethernet switches with SFP ports.

### MODELS:

SFP1000SX-220  
SFP100FX1310-TSC-2Km  
SFP1000LX-10Km  
SFP100FX1310-TSC-20Km

# Intuitive, powerful Web Services

IFS Layer 2+ managed switches include powerful built-in Web Services managed through an intuitive integrated browser-based application. These services provide a comprehensive network management toolkit for real-time programming, status, and management of the switch.

## Features

- Full switch configuration and port management
- Port link aggregation for high-speed trunking and fail-over support (LACP)
- 802.1Q Tagged VLAN, tunneling (Q-in-Q) and private VLAN port management
- Spanning Tree Protocol Configuration (802.1d and 802.1w)
- Simple multicasting with IGMP snooping and query support
- Powerful QoS, bandwidth control and traffic management features to enhance services
- Comprehensive port security includes 802.1x Port Access and Access Control List (ACL)
- Link Layer Discovery Protocol (LLDP) support and configuration
- Cable diagnostics and network health monitoring and status
- Powerful PoE management, scheduling and diagnostics for optimizing PoE networks
- Stacking switch configuration via a single IP address (DSSG-244 Series only)



## 24-Port Gigabit Ethernet Managed Switch

The IFS 24-port Gigabit Ethernet Switch is a Layer 2+ fully managed enterprise-class switch designed for today's high-demand GigE networks. This switch is engineered with a high-performance 48Gbps non-blocking switch architecture capable of handling high data throughput with no risk of packet loss. Integrated and intuitive browser-based Web Services offer real-time programming, status, and management of the switch.

## Features

- 24 10/100/1000Base-TX ports
- 4 SFP (10/100/1000Mbps) shared uplink ports
- Non-blocking switch fabric capable of up to 48Gbps throughput
- Supports up to 255 Multicasting Groups with full IGMP snooping and query
- Simple and intuitive browser-based Web Services
- IEEE compliant for full network interoperability

## Applications

- GigE networks
- Enterprise data
- IP video
- Access control
- VoIP

### MODEL:

GE-DSG-244 24-port GigE Managed Switch with 4 Shared GigE SFP Ports



## 24-Port Fast Ethernet PoE Managed Switch

The IFS 24-port Fast Ethernet PoE Switch is an enterprise-class switch that incorporates the same Layer 2+ feature set as our Gigabit Series switches. This switch provides 24 10/100Mbps Ethernet ports with 2 TP/SFP GigE combo uplink ports and a high-performance 8.8Gbps switch architecture. This model also provides 24 full powered isolated PoE ports. These features make this an ideal switch to be used at the edge of a network to uplink data to a GigE network.

## Features

- 24 10/100Base-TX ports with fully isolated PoE (802.3af)
- 2 TP (10/100/1000Mbps) / SFP (1000Base-SX/LX only) combo GigE uplink ports
- Non-blocking switch fabric capable of up to 8.8Gbps throughput
- Supports up to 255 multicasting groups with full IGMP snooping and query
- Simple and intuitive browser-based Web Services
- IEEE compliant for full network interoperability

## Applications

- 100Mbps edge device transmission
- IP video
- Access control
- VoIP
- Wireless Access Point (WAP)

### MODEL:

GE-DS-242-PoE 24-Port Fast Ethernet with 2 GigE SFP Combo Managed PoE Switch

Network products



**MODELS:**

- GE-DSH-73 Industrial Managed Switch  
7-Port Fast Ethernet + 3-Ports Gigabit TP/SFP Combo
- GE-DSH-82 Industrial Managed Switch  
8-Port Fast Ethernet + 2-Ports Gigabit TP/SFP Combo
- GE-DSH-82-POE Industrial Managed PoE Switch  
8-Port Fast Ethernet + 2-Ports Gigabit TP/SFP Combo

## Industrial Fast Ethernet Managed Switches

The IFS Industrial Ethernet Managed Switch Series is a robust line of Industrial Layer 2+ Ethernet switches designed to meet the needs of the industrial market. Engineered for optimum performance in harsh and demanding environments, these switches are available in either a 7+3 or 8+2 configuration. With three unique IFS industrial fail-safe ring topologies, these switches are specifically designed for mission-critical network recovery and integrity.

### Features

- 10/100Base-TX
- Auto-negotiation and MDI/MDI-X support
- GigE TP/SFP combo uplink ports
- Redundant industrial fail-safe ring topology – 20ms network recovery
- Redundant power with alarm outputs
- PoE option (8+2 version only)
- Wall-mount or DIN-rail mounting options
- Wide operating temperature range
- IEEE compliant for full network interoperability

### Applications

- Industrial security
- Intelligent Transportation Systems (ITS)
- Light and heavy rail
- Industrial/utilities infrastructure
- Telecom Room



## 8-Port Fast Ethernet Switch with PoE Option

The IFS 8-port Fast Ethernet Switch with PoE Option Series provides eight 10/100Mbps Ethernet ports with 2-Gigabit TP/SFP GigE combo ports. These models are engineered with a high-performance wire-speed and switch architecture providing a non-blocking 5.6Gbps switch fabric. Included are the same Layer 2+ feature set and dynamic Web Services as our Gigabit Series switches. Along with the available PoE version, this switch series is ideally suited for use at the edge of a network to uplink data to a GigE network.

### Features

- 8 10/100Base-TX ports with optional PoE
- 2 TP (10/100/1000Mbps) / SFP (1000Base-SX/LX only) combo GigE uplink ports
- Non-blocking switch fabric capable of up to 5.6Gbps throughput
- Supports up to 255 multicasting groups with full IGMP snooping and query
- Simple and intuitive browser-based Web Services
- IEEE compliant for full network interoperability

### Applications

- 100Mbps edge device transmission
- IP video
- Access control
- VoIP
- Wireless Access Point (WAP)

**MODELS:**

- GE-DS-82 8-Port 10/100Mbps with 2-Gigabit SFP Combo Managed Switch
- GE-DS-82-PoE 8-Port 10/100Mbps with 2-Gigabit SFP Combo Managed PoE Switch



## Gigabit Ethernet Unmanaged Switches

The IFS Unmanaged Gigabit Ethernet Switch Series provides five or eight 10/100/1000Mbps Ethernet ports for handling a large volume of Ethernet traffic at the edge. These switches have been engineered with a 10Gbps or 16Gbps internal non-blocking switch fabric, combined with 9K jumbo frame support for fast and reliable data transfer for unmanaged network applications. Each port configuration is offered in a wide operating temperature version.

### Features

- 5 or 8 10/100/1000Mbps RJ-45 ports
- Auto-negotiation and MDI/MDI-X support
- High-performance 10Gbps or 16Gbps non-blocking switch fabric
- Wide operating temperature range
- IEEE compliant for full network interoperability

### Applications

- Industrial security
- Intelligent Transportation Systems (ITS)
- Light and heavy rail
- Industrial/utilities infrastructure

**MODELS:**

- GE-DSGH-5: 5-Port Industrial Gigabit Ethernet Unmanaged Switch (-40~75°C)
- GE-DSGH-8: 8-Port Industrial Gigabit Ethernet Unmanaged Switch (-40~75°C)
- GE-DSG-8: 8-Port Gigabit Ethernet Unmanaged Switch (-10~60°C)

# Optimize your existing cable infrastructure for IP transmission

The IFS line of media converters provides a cost-effective method of extending the investment in your existing cabling infrastructure. When migrating from analog to IP, media converters are a smart way to eliminate the additional material and labor cost of pulling new cable when moving to a network-based system. Whether you have coax, twisted-pair or fiber optics installed in your facility, IFS has the right media converter solution to meet your physical transmission needs.



#### MODELS:

MC-4TX1FXMM-2Km  
4-Port 10/100Base-TX Plus 1-Port 100Base-FX (2km)

MC-4TX1FXSM-15Km  
4-Port 10/100Base-TX Plus 1-Port 100Base-FX (15km)

MC-4TX2FX  
4-Port 10/100Base-TX Plus 2-Port 100Base-FX (2km)

## 4-Port Ethernet-to-Fiber Media Converters

The IFS 4-Port Ethernet-to-Fiber Media Converters are designed to optimize available optical bandwidth. These media converters are engineered with a high-performance switch architecture providing a 1Gbps non-blocking switch fabric to maximize wire-speed packet transfer without risk of packet loss.

The robust design features an industrial-rated enclosure, redundant power, and surge suppression on both power and Ethernet ports. These modules include wall-mount or DIN-rail mounting options and provide reliable and stable operation in harsh environments.

### Features

- 10/100Base-TX with auto MDI/MDI-X function
- 100Base-FX interface with SC connector
- 1Gbps non-blocking switch fabric
- Wall-mount or DIN-rail mounting options
- 12~48VDC redundant power with reverse polarity protection
- Wide operating temperature range
- Multi-mode or single-mode fiber
- Distances up to 15km

### Applications

- Industrial security
- Intelligent Transportation Systems (ITS)
- Light and heavy rail
- Industrial/utilities infrastructure



**MODEL:**  
MCE-Coax

## Ethernet-Over-Coax Media Converter

The IFS Ethernet-Over-Coax media converters provide a cost-effective solution when migrating from an analog coaxial system to an IP-centric system. Using existing coaxial cable saves time, money and labor by eliminating the need to install new cable. The Ethernet-Over-Coax media converters can also extend the range of Ethernet transmission up to 1.6 km.

### Features

- Transmit 10/100Mbps over coax\*
- Auto-negotiation and MDI/MDI-X support
- CO/CPE selectable via DIP switch
- Supports 50 or 75 ohm coax cable

### Applications

Cost-effective solution for:

- Analog-to-IP camera conversion
- Transmit any Ethernet data over coax

\*Requires two modules



## Ethernet-to-Fiber Media Converter and PoE Inserter

The IFS Ethernet-to-Fiber Media Converter and PoE Inserter provides an effective solution for deploying remote PoE powered edge devices with optical fiber.

### Features

- 10/100Base-TX
- Distance up to 100 meters on RJ45 port
- 100Base-FX interface with SC connector
- Up to 2km on multi-mode fiber
- Inserts 48 VDC (15.4w) power on Cat 5e or 6 cable
- Protects non-PoE devices if accidentally connected
- Link fault pass-through function for remote alarm notification

### Applications

- PoE cameras
- PoE access control
- VoIP phones
- Wireless access points

**MODEL:**  
MC100FX-TX-POE



## Power over Ethernet Injector

The IFS Power over Ethernet (PoE) mid-span injector allows for Ethernet data and power to be simultaneously transmitted over a single Category 5e or 6 cable. This module eliminates the need to place an edge device near a power source or to pull an additional power cable, providing increased installation flexibility and reduced labor costs.

### Features

- 10/100Base-TX
- PoE IEEE 802.3af compliant
- Inserts 48 VDC (15.4w) power on Ethernet cable
- Protects non-PoE devices if accidentally connected
- Distance up to 100 meters

### Applications

- PoE cameras
- PoE access control
- VoIP phones
- Wireless access points

**MODEL:**  
MS-POE



## Power over Ethernet Splitter

The IFS Power over Ethernet Splitter can be used at the network edge to split Ethernet data and power for transmitting to non-PoE edge devices while providing an independent remote 5/12VDC power source. This module reduces the need to place an edge device near a power source or to pull an additional power cable, providing increased installation flexibility and reduced labor costs.

### Features

- 10/100Base-TX
- PoE IEEE 802.3af compliant
- Splits PoE off Ethernet cable
- Dip-switch selectable for 5V or 12V DC power output
- Deployment distance up to 100 meters

### Applications

- PoE cameras
- PoE access control
- VoIP Phones
- Wireless access points

**MODEL:**  
SP-POE

North America  
T 888-437-3287  
F 503-691-7566  
E sales@ifs.com

Asia  
T 852-2907-8108  
F 852-2142-5063

Australia and New Zealand  
T 613-9239-1200  
F 613-9239-1299

Europe  
T 44-113-238-1668  
F 44-113-253-8121

Latin America  
T 561-998-6100  
F 561-994-6572

[utcfireandsecurity.com](http://utcfireandsecurity.com)

Specifications subject to  
change without notice.

© 2010 UTC Fire & Security.  
All rights reserved.

GE and the GE monogram are trademarks of the  
General Electric Company and are under license  
to UTC Fire & Security, 9 Farm Springs Road,  
Farmington, CT 06034-4065



## We're just getting started.

With IFS, you have access to a full line of transmission solutions over various physical media types. This broad offering means you have a seamless, cost-effective migration path to leading-edge technology. The introduction of four new product categories—Networking, Media Converters, Fiber, and UTP—means new and existing installations will benefit from IFS as your one-source transmission solutions provider.

*Security Products by GE are now part of the UTC Fire & Security family*



**UTC Fire & Security**

A United Technologies Company