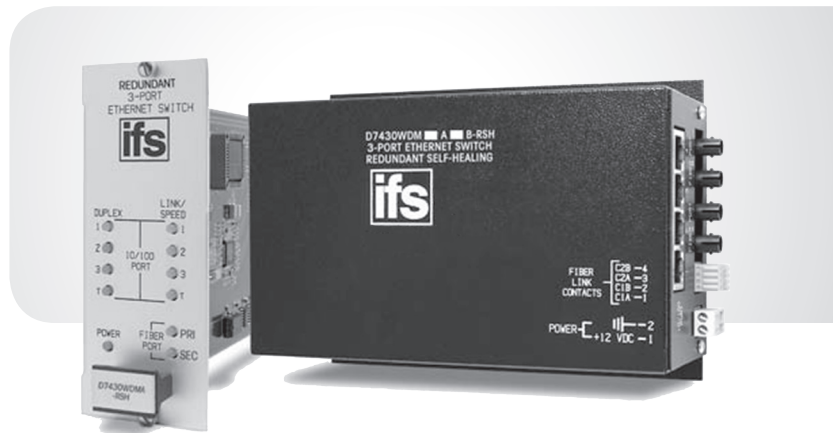# D7400RSH Series

## IFS Hardened 3 Port 10/100 Mbps Ethernet Redundant Self-healing



## OVERVIEW

The IFS D7400RHS Series Ethernet transceivers provide transmission of (3) 10/100 Mbps Ethernet data signals in a redundant, self-healing ring network architecture utilizing one optical fiber. The transceivers feature 3 electrical and 2 optical ports and can be configured in a redundant self-healing capacity that allows the user to easily configure a network that is highly reliable. The 3 electrical ports are capable of connecting at 10/100 Mbps Ethernet data 802.3 protocol using auto-negotiating and auto-MDI/MDI-X features. Models within this series are available for use with multimode or single mode optical fiber and are compatible with standard 100-FX networks. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. Each transceiver incorporates power and link status indicating LED's for monitoring proper system operation. In addition, 2 continuously active contact closure relays are available to activate an external audible or visual warning signal in the event of a fiber break or loss of power. The modules are available in either stand-alone or rack mount.
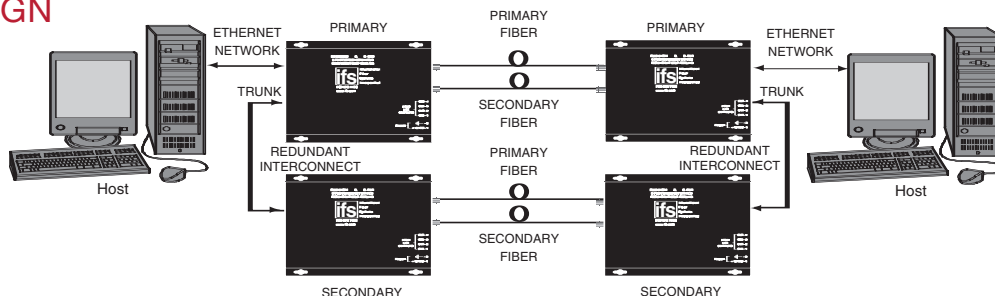
## APPLICATION EXAMPLES

• Outdoor Traffic Management Control
  – Intra-City and Inter-City Traffic Management
• Industrial and Factory Automation
• High-Speed Computer Links
  – High-Speed Data Transmission
• CCTV

## STANDARD FEATURES

• 10/100 Mbps Ethernet
    -Auto-Negotiating
    -10/100 Selectable
• No In-field Electrical or Optical Adjustments Required
• Auto Network Detection MDI/MDI-X
• Relay Output for Network Communication Failure Notification
• Power, Transmit and Receive Data Status LED Indicators
• Multimode and Single mode Versions Available
• Tested and Certified by an Independent Testing Laboratory for Full Compliance with the Environmental Requirements (Ambient Operating Temperature, Mechanical Shock, Vibration, Humidity with Condensation, High-Line/Low-Line Voltage Conditions and Transient Voltage Protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
• Distances up to 60km (37 miles)
• ST Optical Connectors Standard
• Hot-Swappable Rack Modules
• IEEE 802.3 Compliant
• Comprehensive Lifetime Warranty

## SYSTEM DESIGN



interlogix.com

# D7400RSH Series

IFS Hardened 3 Port 10/100 Mbps Ethernet Redundant Self-healing

## Ordering Information

|  | Part Number | Description | Fibers Required | Optical Pwr. Budget | Max. Distance* |
|---|---|---|---|---|---|
| Multimode 62.5/125µm** | D7420WDMA-RSH ✧ | 3 Port Ethernet (1310/1550 nm) | 1 In/1 Out | 10 dB | 6 miles (10 km) |
|  | D7420WDMB-RSH | 3 Port Ethernet (1550/1310 nm) | 1 In/1 Out | 10 dB | 6 miles (10 km) |
| Single Mode 9/125µm | D7430WDMA-RSH ✧ | 3 Port Ethernet (1310/1550 nm) | 1 In/1 Out | 20 dB | 37 miles (60 km) |
|  | D7430WDMB-RSH | 3 Port Ethernet (1550/1310 mn) | 1 In/1 Out | 20 dB | 37 miles (60 km) |
| Accessories ⬦ | PS12VDC1.5A-U | 12VDC, 1.5A Plug-in Power supply (110/220VAC) with Universal power plug adapter kit (Included) | | | |
| Options | Add '-R3' to Model Number for R3 Rack Mount (Requires R3 Rack purchased separately) | | | | |

*Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
Distance can also be limited by fiber bandwidth. **For 50/125 Fiber, subtract 4 dB from Optical Power Budget.

⬦ All accessories are third party manufactured. ✧ WDMA must mate with a WDMB

## Specifications

### Data

| | |
|---|---|
| Data Interface: | Ethernet |
| Data Rate: | 10/100 Mbps |
| | IEEE 802.3 Compliant |
| Number of Inputs: | 3 |

### Wavelength

| | |
|---|---|
| D7420WDMA-RSH | 1310/1550 nm |
| D7420WDMB-RSH | 1550/1310 nm |
| D7430WDMA-RSH | 1310/1550 nm |
| D7430WDMB-RSH | 1550/1310 nm |

### Number Of Fibers

| | |
|---|---|
| | 1 |

### Connectors

| | |
|---|---|
| Optical: | ST |
| Power: | Terminal Block with Screw Clamps |
| Data: | RJ-45 |

### Electrical & Mechanical

| | |
|---|---|
| Power: | 12 VDC @ 800 mA |
| Number of Rack Slots: | 3 |
| Voltage Regulation: | Solid-state; independent on each board |
| Current Protection: | Automatic Resettable Solid-State Current Limiters |
| Circuit Board: | Meets IPC Standard |
| Size (in./cm.) (LxWxH) | |
| Surface Mount: | 7.0 x 4.9 x 2.0 in., 17.8 x 12.5 x 5.1 cm |
| Rack Mount: | 7.7 x 5.0 x 3.0 in., 19.6 x 12.7 x 7.6 cm |
| Shipping Weight: | < 2 lbs./0.9 kg |

### Environmental

| | |
|---|---|
| MTBF: | > 100,000 hours |
| Operating Temp: | -40° C to +74° C |
| Storage Temp: | -40° C to +85° C |
| Relative Humidity: | 0% to 95% (non-condensing) |

### Agency Compliance

Complies with FDA Performance
Standard for Laser Products, Title 21,
Code of Federal Regulations, Subchapter J

FCC PART 15 COMPLIANT  CE  c UL us

interlogix
United Technologies

interlogix.com

Specifications subject to change without notice.

D7400RSH Series