



Direct-Link™ Industrial Ethernet switches intelligently route Ethernet messages, eliminating collisions and providing deterministic performance.

## Industrial Ethernet Switch

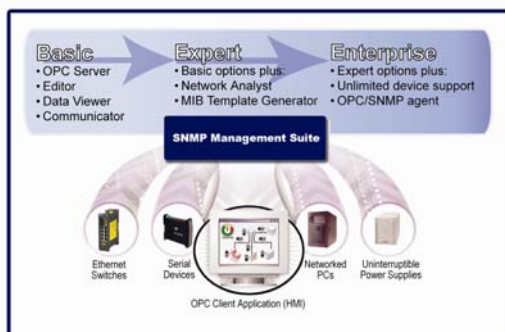
Series 300 - Managed

### Features

- 5- and 8-port managed switches
- DIN rail or panel mount
- Redundant, dual DC power inputs
- Support for up to 2048 MAC addresses
- SNMP agent v1 and v2
- Message filtering to stop multicast storms (IGMP snooping)
- VLAN (port & tag based) for traffic segregation
- Rapid Spanning Tree Protocol (RSTP) for fault-tolerant loops
- Priority queuing for real-time performance
- RMON and port mirroring for diagnostics
- Configuration via secure (https) web interface, Telnet / SSH (network), terminal (RS232) or SNMP (v1, v2, v3)

### SNMP Management Suite

- Real-time analysis and network performance management
- Accessibility and monitoring of power supplies, PLCs and unmanaged devices
- Network view and control from your HMI interface



### Overview

Ethernet switches allow all devices to transmit simultaneously, without collision. This is essential for enabling deterministic delivery of time-critical information. Switches are intelligent devices, keeping track of device locations; this allows messages to be transmitted only from the necessary port, improving performance of the network.

Direct-Link™ Industrial Ethernet managed switches are available with many features to suit your specific requirements. Managed switches are equipped with IGMP snooping, VLAN and QoS for prioritization and provide the ideal platform for your Industrial Ethernet network. Redundant ring network technology, advanced network management, easy configuration and robust mechanical formats are all supported.

### SNMP Management Suite

#### Comprehensive Network Data Available

Direct-Link Industrial Ethernet managed switches generate comprehensive SNMP messages that provide information on switch performance, configuration and alarm status. The Direct-Link SNMP Management Suite enables users to access SNMP messages from the managed switches and other SNMP capable devices including power supplies and PLCs. This provides system-wide monitoring and trouble-shooting of network performance.

#### Easy Integration with Existing HMI Tools

Raw SNMP network data is difficult to interpret and users may not have the necessary software tools. Direct-Link SNMP Management Suite converts SNMP messages into OPC tags that are easily incorporated into, and portrayed by HMI OPC client software (e.g. Wonderware® InTouch®, ICONICS GENESIS®, Rockwell Automation® RSVIEW®, GE Fanuc iFIX® and CIMPLICITY®, and Siemens WinCC® HMI).

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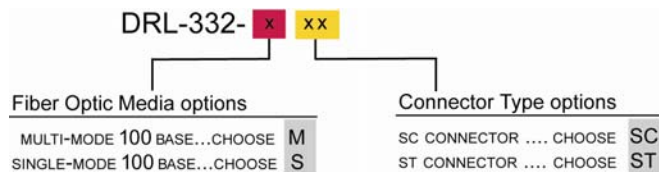
## Technical Information

<b>Ethernet protocols supported</b>	IEEE 802.3 protocols	<b>Input power</b>	Typical - all ports active at 100 Mbps 3.6W to 6.3W (refer to user's manual)
<b>RJ45 ports (shielded)</b>	10 BaseT / 100 BaseTX		
<b>RJ45 speed (10 or 100 Mbps)</b>	Auto-negotiation	<b>Input voltage</b>	10 – 30 V
<b>RJ45 MDI / MDIX and TD/RD</b>	Auto-crossover & auto-polarity	<b>Ethernet isolation</b>	1500 VRMS 1 minute
<b>Fiber optic port wavelength</b>	1300 nm center	<b>Operating temperature</b>	-10°C to 60°C (14°F to 140°F)
<b>Fiber optic multi-mode (mm) optimal</b>	62.5/125 µm (SC or ST connector)	<b>Storage temperature</b>	-40°C to 85°C (-40°F to 185°F)
<b>Fiber maximum distance (full duplex)</b>	4 km (mm)	<b>Humidity (non-condensing)</b>	5 to 95% RH
<b>Fiber optic single-mode (sm) Optimal</b>	9/125 µm (SC or ST connector)	<b>Vibration</b>	IEC68-2-6
<b>Fiber maximum distance (full duplex)</b>	20 km (sm)	<b>Electrical safety</b>	EN61010-1 (IEC61010)
<b>Typical latency for 10 Mbps ports</b>	16 µs + frame time (varies on load & settings)	<b>EMI emissions</b>	FCC part 15, ICES 003, EN55011 ; Class A
<b>Typical latency for 100 Mbps ports</b>	5 µs + frame time (varies on load & settings)	<b>EMC immunity</b>	EN61326
<b>Full or half duplex operation</b>	RJ45: full / half duplex Fiber: full duplex	<b>UL approval</b>	UL 508 (E205563) UL 1604 (E314891) - Class 1, Div 2 - Groups A, B, C & D Hazardous Locations
<b>MAC addresses supported</b>	2048		
<b>"OK" output</b>	Power & operational status	<b>Dimensions</b>	Height: 142.24mm (5.60") Depth: 102.36mm (4.03") Width: 5-port: 27.18mm (1.07") 8-port: 38.74mm (1.525")
<b>Voltage</b>	Same as switch input voltage		
<b>Maximum current output</b>	0.5 Amp		
<b>Mounting</b>	DIN rail or panel mount	<b>Packaging</b>	IP30 protection

## Ordering Information

Part Number	Product Description
<b>DRL-002</b>	DB9 to RJ45 connector (configuration port)
<b>DRL-332-xxx</b>	Industrial 5-port Web managed Ethernet switch, managed, 3 RJ45, 2 fiber
<b>DRL-350</b>	Industrial 5-port Ethernet switch, managed, 5 RJ45, redundant power supply
<b>DRL-362-xxx</b>	Industrial 8-port Web managed Ethernet switch, managed, 6 RJ45, 2 fiber
<b>DRL-380</b>	Industrial 8-port Ethernet switch, managed, 8 RJ45
<b>DRL-EDS-OPC-BSC</b>	SNMP data server, basis, OPC version 2.0, up to 50 devices
<b>DRL-EDS-OPC-EXP</b>	SNMP data server, expert, OPC version 2.0, up to 50 devices, with network analyst and template generator
<b>DRL-EDS-OPC-ENT</b>	SNMP data server, enterprise, OPC version 2.0, unlimited devices, with network agent

Complete part numbers ending with **xxx** as follows using DRL-332 as an example:



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