

# In-Cabinet DIN Rail Mount Switches

- 5- and 8-port unmanaged
- 5-, 8- and 9-port managed
- SNMP Management Suite & Accessories

*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 the overall performance of the network.*



- Plug and play – no setup required
- DIN rail or panel mount
- Advanced traffic control and diagnostic tools for managed switches



### Series 20 Unmanaged:

Available for both on-machine and in-cabinet applications, Direct-Link™ Ethernet switches provide enhanced performance allowing you to achieve real-time deterministic operation of your Ethernet network. No setup is required; immediately start operating as soon as you power them up.

- Supports all standard 802.3 protocols
- DIN rail or panel mount
- Industrial rated for 0 to 60°C
- Redundant, dual DC power inputs
- Plug and play – no setup required
- Auto-sensing, auto-polarity and auto-cross-over



### Series 0 Managed:

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.

- Supports all standard 802.3 protocols
- DIN rail or panel mount
- Industrial rated for 0 to 60°C
- 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

For additional diagnostic support, Direct-Link SNMP Management Suite (SNMP MS) is also available. This software tool, based on OPC technology, works with the existing HMI application running on a PC. Direct-Link SNMP MS converts SNMP agents being sent to the PC from the Direct-Link Industrial Ethernet switch into OPC tags, which can then be easily displayed in the HMI application.

- Real-time network analysis
- Pre-built tag databases
- SNMP network analyst
- SNMP traps support
- Tag filtering



Complete part numbers containing "xxx" using the chart below:

		<b>DRL-332-xxx</b>	
		↓	↓
<b>FIBER OPTIC MEDIA</b>		<b>TYPE OF CONNECTOR</b>	
MULTI-MODE 100 BASE . . . . .	M	SC CONNECTOR . . . . .	SC
SINGLE-MODE 100 BASE . . . . .	S	ST CONNECTOR . . . . .	ST

	SERIES 20 (UNMANAGED)	SERIES 20 (UNMANAGED) SERIES 20 (MANAGED)	SERIES 20 (MANAGED)
ETHERNET PROTOCOLS SUPPORTED:		IEEE 802.3 PROTOCOLS	
RJ45 PORTS (SHIELDED):		10 BASE-T / 100 BASE-T	
RJ45 SPEED (10 OR 100 Mbps):		AUTO-NEGOTIATION	
RJ45 MDI/MDIX AND TD/RD:		AUTO-CROSSOVER & AUTO-POLARITY	
FIBER OPTIC PORT WAVELENGTH:		1300 NM CENTER	
FIBER MULTI-MODE - OPTIMAL FIBER CABLE:		62.5/125 μM (SC OR ST CONNECTOR)	
FIBER MULTI-MODE - MAX. DISTANCE (FULL DUPLEX):		4 KM	
FIBER SINGLE-MODE - OPTIMAL FIBER CABLE:		9/125 μM (SC OR ST CONNECTOR)	
FIBER SINGLE-MODE - MAX. DISTANCE (FULL DUPLEX):		20 KM	
TYPICAL LATENCY FOR 10 Mbps PORTS:			16 US + FRAME TIME (VARIES ON LOAD/SETTINGS)
TYPICAL LATENCY FOR 100 Mbps PORTS:		5 US + FRAME TIME (VARIES ON LOAD)	
FULL OR HALF DUPLEX OPERATION:		RJ45: FULL / HALF DUPLEX FIBER: FULL DUPLEX	
MAC ADDRESSES SUPPORTED:	1024 (5 PORT) / 2048 (8 PORT)		2048
"OK" OUTPUT:			POWER & OPERATIONAL STATUS
VOLTAGE:			SAME AS SWITCH INPUT VOLTAGE
MAXIMUM CURRENT OUTPUT:			0.5 AMP
MOUNTING:		DIN RAIL OR PANEL MOUNT	
INPUT POWER:		TYPICAL-ALL PORTS ACTIVE AT 100 MBPS 3.6 W TO 6.3 W (REFER TO USER'S MANUAL)	
INPUT VOLTAGE:		10 - 30 VDC	
ETHERNET ISOLATION:		1500 VRMS 1 MINUTE	
OPERATING TEMPERATURE RANGE:		0 TO +60°C (32 TO 140°F)	
STORAGE TEMPERATURE RANGE:		-40 TO +85°C (-40 TO 185°F)	
HUMIDITY (NON-CONDENSING):		5 TO 95% RH	
VIBRATION:		IEC68-2-6	
ELECTRICAL SAFETY:		EN61010-1	
EMI EMISSIONS:		FCC PART 15, ICES-003, EN55011	
EMC IMMUNITY:		IEC61326	
PACKAGING:		IP30 PROTECTION	
DIMENSIONS:		HEIGHT: 142.24 MM (5.60") DEPTH: 102.36MM (4.03") WIDTH: 5-PORT: 27.18MM (1.07") 8- & 9-PORT: 38.74MM (1.525")	

## Ordering Information

PART NUMBER	DESCRIPTION
DRL-002	DB9 to RJ45 connector (configuration port)
DRL-111-xxx	Industrial Ethernet to fiber rail converter, 1 RJ45, 1 fiber
DRL-241-xxx	Industrial 5-port Ethernet switch, unmanaged, 4 RJ45, 1 fiber
DRL-250	Industrial 5-port Ethernet switch, unmanaged, 5 RJ45
DRL-280	Industrial 8-port Ethernet switch, unmanaged, 8 RJ45
DRL-281-xxx	Industrial 9-port Ethernet switch, unmanaged, 8 RJ45, 1 fiber
DRL-290	Industrial 9-port Ethernet switch, unmanaged, 9 RJ45
DRL-332-xxx	Industrial 5-port Web managed Ethernet switch, managed, 3 RJ45, 2 fiber
DRL-350	Industrial 5-port Ethernet switch, managed, 5 RJ45, redundant power supply
DRL-362-xxx	Industrial 8-port Web managed Ethernet switch, managed, 6 RJ45, 2 fiber
DRL-380	Industrial 8-port Ethernet switch, managed, 8 RJ45
DRL-EDS-OPC-BSC	SNMP data server, basic, OPC version 2.0, up to 50 devices
DRL-EDS-OPC-EXP	SNMP data server, expert, OPC version 2.0, up to 50 devices With network analyst and template generator
DRL-EDS-OPC-ENT	SNMP data server, enterprise, OPC version 2.0, unlimited devices With network agent

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