



# HIRSCHMANN

A **BELDEN** BRAND

## New Product Bulletin

NP 319

### Hirschmann™ Introduces Ethernet Converters with Serial Interface

The four new converters from the IOLAN DS series of Hirschmann's product range enable reliable connection for end devices with a serial interface to Ethernet networks.



### IOLAN DS Converters from Hirschmann are Ideal Solutions for Different Application Scenarios

Easy and reliable connection of end devices with serial interfaces to Ethernet networks is now possible with the new series of IOLAN DC converters. Thanks to a variety of different serial interfaces, bandwidths, security functions, protection standards, temperature ranges and special approvals, the IOLAN DC converters provide ideal solutions for a variety of applications, including factory and process automation, building automation, and automation for new energy applications.

Addressable via software, all converters feature at least one Ethernet port and RS 232/422/485 interfaces. In addition, the IOLAN DC converters support various protocols for serial data transmission, including Modbus TCP Gateway, Raw Serial Data over UTP, IPv4 and IPv6. The IOLAN converters feature a robust metal housing with fan-less cooling and are extremely easy to configure using the Perle Device Manager and meet very stringent security and EMC standards.

The compact IOLAN DS1 T meets the requirements of protection standard IP40 and includes a serial DB9M interface as well as a Fast Ethernet port with RJ45 connection with a temperature range of -40°C to +70°C.

The IOLAN SDS4 HL is approved for use in Ex Zone 2, additionally features include an extensive range of security functions such as RADIUS authentication, SNMPv3 and IPSec VPN Gateway and includes four serial interfaces for RJ45 ports.

The IOLAN SDS3 M has three serial RJ45 interfaces and is equipped with a V.92/V.90 modem, which enables the converter to connect to wide area networks. The temperature range for this device is 0°C to +55°C.

The IOLAN SDS16C HV excels in extreme operating conditions, e.g. the kind of conditions found in transformer stations in the electricity industry. Designed for use in switch cabinets, this IP30 converter offers 16 serial RJ45 interfaces and two RJ45 Gigabit Ethernet ports.





#### Benefits at a Glance

- Four versions for different application scenarios
- Meets high security and EMC standards
- Approval for Ex Zone 2
- RS 232/422/485 interfaces selectable via software
- Supports various protocols for serial data transmission
- Fast or Gigabit Ethernet ports
- Redundant Ethernet connection
- V.92/V.90 modem for connection to wide area networks
- Easy configuration using the Perle Device Manager
- Temperature range: -40°C to +70°C
- IP40 or IP30 protection standard
- Robust metal housing
- Fanless cooling



## Versatile Solutions - Connecting End Devices to Ethernet with the Use of Serial Interfaces

### Technical Data

Port-Type and Description				
				
<b>Type</b>	IOLAN DS1 T	IOLAN SDS3 M	IOLAN SDS4 HL	IOLAN SDS16C HV
<b>Order Number</b>	942 036 - 001	942 036 - 201	942 036 - 101	942 036 - 301
<b>Number of Serial Ports</b>	1	3	4	16
Port Interfaces				
<b>Serial Port Interface</b>	Software selectable RS-232/422/485 on DB9M	Software selectable EIA-232/422/485 on RJ45	Software selectable EIA-232/422/485 on RJ45	Software selectable RS232/RS485/RS422 DTE on RJ45 - RS485: full and half duplex
<b>Serial Port Speeds</b>	50 bps to 230 Kbps with customizable baud rate support			
<b>Data Bits</b>	5, 6, 7, 8, 9-bit protocol support			
<b>Parity</b>	Odd, Even, Mark, Space, None			
<b>Flow Control</b>	Hardware, Software, Both			
<b>Local Console Port</b>	RS232 on Serial Port			RS232 on RJ45 with DB9 Adapter (provided)
<b>Network</b>	1x 10/100-base TX Ethernet RJ45			2x 10/100/1000-base TX Ethernet RJ45
	Software selectable Ethernet speed 10/100 Autonegotiation			Software selectable Ethernet, speed 10/100/1000, Autonegotiation
	Software selectable Half/Full/Auto duplex			
Power Supply				
<b>Input Voltage Range</b>	9-30 V DC			88-300 V DC or 85-265 V A, C (47-63 Hz)
Ambient Conditions				
<b>Operating Temperature</b>	-40°C to 70°C	0°C to 55°C	-40°C to 70°C	-40°C to 70°C
Approvals				
Safety Standard for IT Equipment Substation Hazardous Locations	FCC	FCC	FCC	FCC
	IEC 60950-1	IEC 60950-1	IEC 60950-1	IEC 60950-1
				IEC 61850-3, IEC61613
	ATEX Class 1 Zone 2, ANSI/ISA - 12.12.01 - 2007 Class 1 Division 2			
Serial Machine to Ethernet				
	Tunnel raw serial data across Ethernet	Tunnel raw serial data across Ethernet - clear or encrypted		
	Raw serial data over TCP/IP			
	Raw serial data over UDP			
	Serial data control of packetized data			
	Share serial ports with multiple hosts/servers			
	Virtual modem simulates a modem connection - assign IP address by AT phone number			
	Virtual modem data can be sent over the Ethernet link with or without SSL encryption			
	TruePort com/tty redirector for serial based applications on Windows, Vista, Linux, Solaris, SCO and HP UX			
	RFC 2217 standard for transport of serial data and RS232 control signals			
	Customizable or fixed serial baud rates			
	Serial encapsulation of industrial protocols such as ModBus, DNP3 and IEC-870-5-101			
	ModBus TCP gateway enables serial Modbus ASCII/RTU device connection to ModBus TCP			



## Accessories: Adapter for IOLAN DS, SDS

Order Number	Type	Description	Application
942 048 - 001	DBA0010	DB25F	
942 048 - 002	DBA0011	DB25M	Cisco/HP/IBM/Sun
942 048 - 003	DBA0013	DB25M PC-Pinout	Modem
942 048 - 004	DBA0020	DB9F	APC/Checkpoint/Dell/Extreme Networks/ F5/Juniper/Nortel/Sun/HP/IBM
942 048 - 005	DBA0021	DB9M	Sun/Zyxel
942 048 - 006	DBA0023	DB9M PC-Pinout	All manufacturers with provided cable for PC/notebook
942 048 - 007	DB9 to PRL/ config connector	DB9F	Perle IOLAN and IOLAN C Console *
942 048 - 008	DBA0031	RJ45M-RJ45F Cisco/Sun	Cisco/Sun/Juniper

\* Included in delivery with all variants with RJ45 on serial side or RJ45 device console. Conform to DBA0020.

## Adapter for IOLAN SDS C

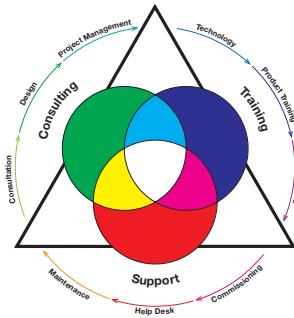
Order Number	Type	Description	Application
942 048 - 009	DBA0010C	DB25F	
942 048 - 010	DBA0011C	DB25M	Cisco/HP/IBM/Sun
942 048 - 011	DBA0013C	DB25M PC-Pinout	Modem
942 048 - 012	DBA0020C	DB9F	APC/Checkpoint/Dell/Extreme Networks/ F5/Juniper/Nortel/Sun/HP/IBM
942 048 - 013	DBA0021C	DB9M	Sun/Zyxel
942 048 - 014	DBA0023C	DB9M PC-Pinout	All manufacturers with provided cable for PC/notebook
942 048 - 015	DBA0031C	RJ45M-RJ45F Cisco/Sun	Cisco/Sun/Juniper

## DinRail Adapter

Order Number	Type	Application
942 048 - 016	DIN Rail Mount Kit 1	DIN Rail Mounting Kit for 1 Port IOLAN DS
942 048 - 017	DIN Rail Mount Kit 2	DIN Rail Mounting Kit for 4 port IOLAN SDS wall mount models and Stand-Alone Media Converter



## The Hirschmann Competence Center



Hirschmann provides an economical end-to-end solution for your network. In addition to its well-known products, Hirschmann also offers a wide range of vendor-independent services - whether it is consulting, training or support. At the Hirschmann Competence Center, you can be sure of tailor-made service from a single supplier.

Whichever technology you use, our experts will support you all the way, from designing your network to optimizing the performance required in the operational phase. Up-to-date manufacturer's expertise, an international service network and fast access to external specialists guarantees you the best possible support. Bundle your individual service package today!

To learn more about the Hirschmann Competence Center or to register for sessions go to:

[www.hicomamericas.com](http://www.hicomamericas.com)

### Always the Right Solution

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You will find further information and technical details online at [www.hirschmann-usa.com](http://www.hirschmann-usa.com) or contact our Sales Team directly: **Tel. 717.217.2299**.