

IOLAN DS/SDS Ethernet Converters with Serial Interfaces



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.

Product Features

- Meets high security and EMC standards
- Approval for Ex Zone 2
- RS 232/422/485 interfaces selectable via software
- Fast or Gigabit Ethernet ports
- Redundant Ethernet connection
- V.92/V.90 modem for connection to wide area networks
- IP40 or IP30 protection standard
- Robust metal housing
- Fanless cooling

Technical Information

Product Description				
Type	IOLAN DS1 T	IOLAN SDS3 M	IOLAN SDS4 HL	IOLAN SDS16C HV
Available Ports	1	3	4	16
Order No.	942 036-001	942 036-201	942 036-101	942 036-301
Ambient Conditions				
Operating Temperature	-40 °C to +70 °C	0 °C to +55 °C	-40 °C to +70 °C	-40 °C to +70 °C
Interfaces				
Serial Port Interface	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
Serial Port Speeds	50 bps to 230 Kbit/s with customizable baud rate support			
Data Bits	5, 6, 7, 8, 9-bit protocol support			
Parity	Odd, Even, Mark, Space, None			
Flow Control	Hardware, Software, Both			
Local Console Port	RS232 on Serial Port	RS232 on RJ45 with DB9 Adapter (provided)	RS232 on RJ45 with DB9 Adapter (provided)	RS232 on RJ45 with DB9 Adapter (provided)
Network	1 x 10/100Base-TX Ethernet RJ45			2 x 10/100/1000Base-TX Ethernet RJ45
Power Supply				
Input Voltage Range	9 to 30 V DC			88 to 300 V DC or 85 to 265 V AC (47 to 63 Hz)
Approvals				
FCC	FCC			
Safety Standard for IT Equipment	IEC 60950-1			
Substation	n/a			IEC 61850-3, IEEE 1613
Hazardous Locations	n/a		ATEX Class 1 Zone 2, ANSI/ISA – 12.12.01 – 2007 Class 1 Division 2	n/a



IOLAN DS/SDS Ethernet Converters with Serial Interfaces

Adapter for IOLAN DS, SDS			
Type	Order No.	Description	Application
DBA0010	942 048-001	DB25F	–
DBA0011	942 048-002	DB25M	Cisco/HP/IBM/Sun
DBA0013	942 048-003	DB25M PC-Pinout	Modem
DBA0020	942 048-004	DB9F	APC/Checkpoint/Dell/Extreme Networks/F5/Juniper/Nortel/Sun/HP/IBM
DBA0021	942 048-005	DB9M	Sun/Zyxel
DBA0023	942 048-006	DB9M PC-Pinout	All manufacturers with provided cable for PC/notebook
DB9 to PRL/config connector	942 048-007	DB9F	Perle IOLAN and IOLAN C Console*
DBA0031	942 048-008	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			
Type	Order No.	Description	Application
DBA0010C	942 048-009	DB25F	–
DBA0011C	942 048-010	DB25M	Cisco/HP/IBM/Sun
DBA0013C	942 048-011	DB25M PC-Pinout	Modem
DBA0020C	942 048-012	DB9F	APC/Checkpoint/Dell/Extreme Networks/F5/Juniper/Nortel/Sun/HP/IBM
DBA0021C	942 048-013	DB9M	Sun/Zyxel
DBA0023C	942 048-014	DB9M PC-Pinout	All manufacturers with provided cable for PC/notebook
DBA0031C	942 048-015	RJ45M-RJ45F Cisco/Sun	Cisco/Sun/Juniper

DIN Rail Adapter		
Type	Order No.	Application
DIN Rail Mount Kit 1	942 048-016	DIN Rail Mounting Kit for 1 port IOLAN DS
DIN Rail Mount Kit 2	942 048-017	DIN Rail Mounting Kit for 4 port IOLAN SDS wall mount models and Stand-Alone Media Converter





Hardened Rail Transceivers, Hubs, and Fieldbus Transceivers/Modems



RS232 Media Converters		
Part No.	Order No.	Description
OZDV 2451P	943 316-021	1 electrical and 1 optical port, bus-powered, POF 0 to 60 m
OZDV 2451G	943 299-021	1 electrical and 1 optical port, bus-powered, multimode 0 to 2000 m
OZDV 2471P	943 340-021	1 electrical and 1 optical port, POF 0-100M, HCS 0 to 2100 m
OZDV 2471G	943 341-021	1 electrical and 1 optical port, multimode 0 to 6700 m
OZDV 2471G-1300	933 990-021	1 electrical and 1 optical port, singlemode 0 to 32 km

Hardened Fiber Modems/Repeaters



RS485 Repeaters		
Part No.	Order No.	Description
OZD 485 G12 BASIC	943 893-321	1 electrical and 2 optical ports, multimode-line capable
OZD 485 G12 PRO	943 894-321	1 electrical and 2 optical ports, predictive maintenance, multimode, redundant ring capable
OZD 485 G12-1300 PRO	943 895-321	1 electrical and 2 optical ports, predictive maintenance, singlemode, redundant ring capable



PROFIBUS Repeaters		
Part No.	Order No.	Description
OZD PROFI 12M P11	943 728-221	For plastic fiber, 1 electrical, 1 optical port
OZD PROFI 12M P12	943 728-321	For plastic fiber, 1 electrical, 2 optical ports redundant ring capable
OZD PROFI 12M G11	943 727-221	1 electrical, 1 optical port, multimode
OZD PROFI 12M G12	943 727-321	1 electrical, 2 optical ports, multimode – redundant ring capable
OZD PROFI 12M G12 EEC	943 730-321	1 electrical, 2 optical ports, multimode – redundant ring capable, EEC*
OZD PROFI 12M G11 1300	943 729-221	1 electrical, 1 optical port, singlemode
OZD PROFI 12M G12 1300	943 729-321	1 electrical, 2 optical ports, singlemode – redundant ring capable
OZD PROFI 12M G12 1300 EEC	943 256-321	1 electrical, 2 optical ports, singlemode – redundant ring capable, EEC*
OZD PROFI 12M P11 PRO	943 904-221	1 electrical, 1 optical port, predictive maintenance, POF
OZD PROFI 12M P12 PRO	943 904-321	1 electrical, 2 optical ports, predictive maintenance, POF, redundant ring capable
OZD PROFI 12M G11 PRO	943 905-221	1 electrical, 1 optical port, predictive maintenance, multimode

NOTE: *Devices showing EEC above can operate in extended environmental conditions: -20 °C to +60 °C, 100% humidity



Hardened Fiber Modems/Repeaters

PROFIBUS Repeaters (continued)		
Part No.	Order No.	Description
OZD PROFIBUS 12M G12 PRO	943 905-321	1 electrical, 2 optical ports, predictive maintenance, multimode, redundant ring capable
OZD PROFIBUS 12M G12 EEC PRO	943 907-321	1 electrical, 2 optical ports, predictive maintenance, multimode, redundant ring capable, EEC*
OZD PROFIBUS 12M G11-1300 PRO	943 906-221	1 electrical, 1 optical port, predictive maintenance, singlemode
OZD PROFIBUS 12M G12-1300 PRO	943 906-321	1 electrical, 2 optical ports, predictive maintenance, singlemode, redundant ring capable
OZD PROFIBUS 12M G12-1300 EEC PRO	943 908-321	1 electrical, 2 optical ports, predictive maintenance, singlemode, redundant ring capable, EEC*

NOTE: *Devices showing EEC above can operate in extended environmental conditions: -20 °C to +60 °C, 100% humidity



PROFIBUS ATEX Zone 1 Repeaters		
Part No.	Order No.	Description
OZD PROFIBUS G12DU ATEX 1	943 881-321	1 electrical, 2 optical ports, predictive maintenance, multimode, redundant ring capable, cabinet assembly
OZD PROFIBUS G12DK ATEX 1	943 882-321	1 electrical, 2 optical ports, predictive maintenance, multimode, redundant ring capable, plastic IP67 housing for mounting in ATEX-certified housing
OZD PROFIBUS G12DE ATEX 1	943 883-321	1 electrical, 2 optical ports, predictive maintenance, multimode, redundant ring capable, stainless steel IP67 housing



Geniusbus Repeaters		
Part No.	Order No.	Description
OZD GENIUS G12	933 989-021	1 electrical, 2 optical ports, redundant ring capable
OZD GENIUS G12 1300	934 233-021	1 electrical, 2 optical ports, singlemode, redundant ring capable



Modbus+ Repeaters		
Part No.	Order No.	Description
MODBUS PLUS G12	943 740-021	1 electrical, 2 optical ports, redundant ring capable
MODBUS PLUS G12 1300	943 821-021	1 electrical, 2 optical ports, singlemode, redundant ring capable



WorldFIP Repeaters		
Part No.	Order No.	Description
OZD FIP G3	933 847-321	1 electrical, 2 optical ports, multimode, redundant ring capable
OZD FIP G3 T	933 847-521	1 electrical, 2 optical ports, multimode, redundant ring capable, bus termination included

