



## Product information

### Rail Data Diode HV Train - RDD20-1400A-EKKS999HHE3S -

### RDD20-1400A-EKKS999HHE3SXX.X.XX

Industrial Ethernet:Rail Data Diode (RDD):Rail Data Diode HV Train - RDD20-1400A-EKKS999HHE3S	
<a href="http://dev-catalog.beldensolutions.com/link/57078-24455-504098-504418/en/conf/uistate">http://dev-catalog.beldensolutions.com/link/57078-24455-504098-504418/en/conf/uistate</a>	
Name	Rail Data Diode HV Train - RDD20-1400A-EKKS999HHE3S
	
	Data Diode for 110 VDC and 110 / 230 VAC operating voltage with train approvals
Delivery informations	
Availability	available
Product description	
Type	RDD20-1400A-EKKS999HHE3SXX.X.XX
Order No.	942 197-004
Description	Data Diode for 110 VDC and 110 / 230 VAC operating voltage with train approvals
Port type and quantity	14 ports in total, thereof 6 x M12 "D"-coded and 8 x RJ45
More Interfaces	
V.24 interface	2 x RJ11 socket
SD-card slot	2 x SD card slot for Autoconfiguration Adapter ACA31
Power supply/signaling contact	2 x plug-in terminal block, 3- pin / 1 x plug-in terminal block, 2- pin
Network size - length of cable	
Twisted pair (TP)	0 m ... 100 m
Network size - cascadiability	
Line - / star topology	any
Power requirements	
Operating voltage	2 x 110 VDC (77 .. 138 VDC), 2 x 110 / 230 VAC (93,5 .. 253 VAC)
Power consumption	21 W
Mechanical construction	
Dimensions (W x H x D)	146 mm x 164 mm x 120 mm
Weight	2200 g
Protection class	IP20
Mounting	DIN Rail
Software	
Management	DNS Client, Dual Software Image Support, TFTP, SFTP, SC,P LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet
Diagnostics	Management Address Conflict Detection, MAC Notification, Signal Contact, Device Status Indication, TCPDump, LEDs, Syslog, Persistent Logging on ACA, Email Notification, Port Monitoring with Auto-Disable, Link Flap Detection, Overload Detection, Duplex Mismatch Detection, Link Speed and Duplex Monitoring, RMON (1,2,3,9), Port Mirroring 1:1, Port Mirroring 8:1, Port Mirroring N:1, RSPAN, SFLOW, VLAN Mirroring, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management, Configuration Check Dialog, Switch Dump, Snapshot Configuration Feature
Configuration	Automatic Configuration Undo (roll-back), Configuration Fingerprint, Text-based Configuration File (XML), BOOTP/DHCP Client with Auto-Configuration, DHCP Server: per Port DHCP Server: Pools per VLAN, AutoConfiguration Adapter ACA31 (SD card), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), CLI Scripting Full-featured MIB Support, Web-based Management Context-sensitive Help
Security	MAC-based Port Security; Port-based Access Control with 802.1X; Guest/unauthenticated VLAN; Integrated Authentication Server (IAS); RADIUS VLAN Assignment; RADIUS Policy Assignment; Multi-Client Authentication per Port; MAC Authentication Bypass; DHCP Snooping; Dynamic ARP Inspection; Automatic Denial-of-Service Prevention; LDAP; Ingress MAC-based ACL; Ingress IPv4-based ACL; Time-based ACL; VLAN-based ACL; Ingress VLAN-based ACL; ACL Flow-based Limiting; Access to Management restricted by VLAN; Device Security Indication; Audit Trail; CLI Logging; HTTPS Certificate Management; Restricted Management Access; Appropriate Use Banner; Configurable Password Policy; Configurable Number of Login Attempts; SNMP Logging; Multiple Privilege Levels; Local User Management; Remote Authentication via RADIUS; User Account Locking
Redundancy functions	HIPER-Ring (Ring Switch); HIPER-Ring over Link Aggregation; Link Aggregation with LACP; Link Backup; Media Redundancy Protocol (MRP) (IEC62439-2); MRP over Link Aggregation; Sub Ring Manager; RSTP 802.1D-2004 (IEC62439-1); RSTP Guards; VRRP; VRRP Tracking; HlVRRP (VRRP enhancements); Redundant Network Coupling
Industrial Profiles	EtherNet/IP protocol, IEC61850 protocol (MMS Server, Switch Model), ModbusTCP, PROFINET IO Protocol



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<b>Time synchronisation</b>	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server
<b>Miscellaneous</b>	Port Power Down, Manual Cable Crossing
<b>Switching</b>	Independent VLAN Learning, Fast Aging, Static Unicast/Multicast Address Entries, QoS / Port Prioritization (802.1D/p), TOS/DSCP Prioritization, Interface Trust Mode, CoS Queue Management, IP Ingress DiffServ Classification and Policing, Queue-Shaping / Max. Queue Bandwidth, Flow Control (802.3X), Egress Interface Shaping, Ingress Storm Protection, Jumbo Frames, VLAN (802.1Q), Protocol-based VLAN, VLAN Unaware Mode, Voice VLAN, MAC-based VLAN, IP subnet-based VLAN, IGMP Snooping/Querier per VLAN (v1/v2/v3), Unknown Multicast Filtering, Multiple VLAN Registration Protocol (MVRP), Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP), Jumbo Frames
<b>Routing</b>	IP/UDP Helper, Full Wire-Speed Routing, Port-based Router Interfaces, VLAN-based Router Interfaces, Loopback Interface, ICMP Filter, Net-directed Broadcasts, OSPFv2, RIP v1/v2, ICMP Router Discovery (IRDP), Static Unicast Routing, Proxy ARP, Static Route Tracking
<b>Ambient conditions</b>	
<b>Operating temperature</b>	-40 °C ... 70 °C
<b>Addition</b>	IEC 60068-2-2 Dry Heat Test +85°C 16 Hours
<b>Storage/transport temperature</b>	-40 °C ... 85 °C
<b>Relative humidity (non-condensing)</b>	5 % ... 95 %
<b>Mechanical stability</b>	
<b>IEC 60068-2-27 shock</b>	vertical: 30 m/s <sup>2</sup> , 30 ms, horizontal: 50 m/s <sup>2</sup> , 30 ms
<b>IEC 60068-2-6 vibration</b>	Operating: 5 Hz .. 150 Hz, broadband noise vertical: 1,0 m/s <sup>2</sup> (rms) horizontal: 0,7 m/s <sup>2</sup> (rms), not operating: 5 Hz .. 150 Hz, broadband noise vertical: 7,9 m/s <sup>2</sup> (rms) horizontal: 5,5 m/s <sup>2</sup> (rms)
<b>EMC interference immunity</b>	
<b>EN 61000-4-2 electrostatic discharge (ESD)</b>	6 kV contact discharge, 8 kV air discharge
<b>EN 61000-4-3 electromagnetic field</b>	20 V/m (80 .. 1000 MHz), 10 V/m (1400 .. 2000 MHz), 5 V/m (2000 .. 2700 MHz), 3 V/m (5100 .. 6000 MHz)
<b>EN 61000-4-4 fast transients (burst)</b>	2 kV power line, 2 kV data line
<b>EN 61000-4-5 surge voltage</b>	2 kV (line / ground), 1 kV (line / line) power supply; 2 kV (line/earth) data line
<b>EN 61000-4-6 conducted immunity</b>	10 V (150 kHz .. 80 MHz)
<b>EN 61000-4-16 mains frequency voltage</b>	300 A/m
<b>EMC emitted immunity</b>	
<b>FCC CFR47 Part 15</b>	FCC 47 CFR Part 15 Class A
<b>EN 55022</b>	EN 55022 Class A
<b>Approvals</b>	
<b>Basis Standard</b>	CE, EN 60131-2
<b>Safety of industrial control equipment</b>	EN 60950-1
<b>Transportation</b>	EN50121-4, EN51055, EN 45545-2
<b>Scope of delivery and accessories</b>	
<b>Scope of delivery</b>	Device, terminal blocks, general safety instructions
<b>Accessories to order separately</b>	Terminal cable 943 301-001; AutoConfiguration Adapter ACA31 942 074-001; Network management software Industrial HiVision 943 156-xxx; 3-pin terminal block for supply voltage (50 pieces) 943 845-008; 2-pin terminal block for signal contact (50 pieces) 943 845-010; Power Cord 942 000-001; Protection cap for RJ45 socket (50 pieces) 943 936-001; Dust-Cover set for M12 socket, metal (25 pcs.) 942 057-001; Dust-Cover set for M12 socket, plastic (25 pcs.) 942 057-002

For more information please contact:

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