



Entry-level Redundancy Switch

RED25

The RED25 family of switches offers maximum flexibility and a future-proof network design. This is an affordable solution for industrial network engineers, system integrators and machine builders working on entry-level applications.

Based on Hirschmann Operating System (HiOS) software, RED25 supports several redundancy technologies, while offering a comprehensive range of security features.

This Fast Ethernet (FE) switch is offered in two four-port versions:

- Four FE TX ports
- Two FE TX ports, plus two FE small form-factor pluggable (SFP) ports

The SFP-based fiber support enables a flexible network structure by allowing to change fiber ports in the field. A comprehensive set of security features also offers all-around network protection. The RED25 switches guarantee a reliable network of applications with rigorous real-time requirements in accordance with IEEE 1588 v2. Further features include an extended operating temperature range from -40 °C to +70 °C, broad immunity to electrostatic discharges and high-vibration resistance.



Product Features

- Interruption-free data communications thanks to the redundancy technologies PRP and HSR, fast recovery with DLR, RSTP and MRP
- Two FE port types available (4 x TX and 2 x TX/2 x SFP)
- Allows for connection to existing networks SFP modules to enable flexibility for in-the-field updates
- Comprehensive security mechanisms provide all-around network protection
- Broad immunity to electrostatic discharges, plus high-vibration resistance
- Small form-factor redundancy box (RedBox)
- Supports distances up to 100 kilometers
- HiOS Layer 2 – Standard software
- 24 V power supply
- Device replacement with auto-configuration adapter ACA22-USB
- Operating temperature range from -40 °C to +70 °C (standard model: 0 °C to +60 °C)

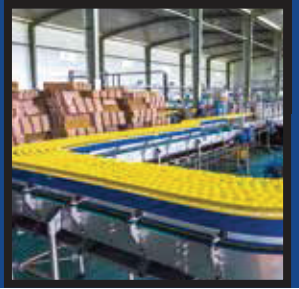


Entry-level Redundancy Switch (continued)

Technical Information

Product Description	
Type	RED25-xx
Description	Managed, Industrial Switch DIN Rail, fanless Design
Port Type and Quantity	Ports in total: 4, 4 x 10/100 TX, or 2 x 10/100 TX/2 x FE SFP
Additional Interfaces	
V.24 Interface	1x RJ11 socket
USB	1x to connect auto-configuration adapter ACA22 USB
Fast ETHERNET Network Size	
Twisted Pair	0 to 100 m
Multimode Fiber (MM) 50/125 µm	50/125 µm, 0 to 5000 m, 8 dB link budget; 62.5/125 µm, 0 to 4000 m, 11 dB link budget (with M-Fast SFP-MM/LC)
Singlemode Fiber (SM) 9/125 µm	0 to 25 km, 13 dB link budget (with M-Fast SFP-SM/LC); 25 to 65 km, 10 to 29 dB link budget (with M-Fast SFP-SM+/LC)
Singlemode Fiber (LH) 9/125 µm	40 to 104 km, 10 to 29 dB link budget (with M-Fast SFP-LH/LC)
Network Size - Cascadability	
Line -/Star Topology	any
Ring Structure	>200 Switches
Fault Recovery Time	0 ms with PRP or HSR
Power Requirements	
Operating Voltage	12 to 48 V DC redundant, or 24 V AC
Software	
Supported HiOS Software Levels	Layer 2 Standard (LS2)
Ambient Conditions	
Operating Temperature	0 °C to +60 °C or -40 °C to +70 °C, optional conformal coating
Relative Humidity (non-condensing)	10% to 95%
Mechanical Construction	
Dimensions (W x H x D)	46 x 130 x 105 mm
Weight	320 g
Protection Class	IP20
Approvals	
Safety of Industrial Control Equipment	EN 60950, UL 61010-1/-2-210
Reliability	
MTBF Range	www.hirschmann.com
Warranty	5 years standard

NOTE: These are the prominent technical specifications. For complete technical specifications visit: www.hirschmann.com



Entry-level Redundancy Switch Configurations



EtherNet/IP™



RED25-04 00 2Z6 TT S DD Z9 HM E 2S XX.X

Design

RED25 = Redundancy Switch

Number of Fast Ethernet Ports

04 = 4 Fast Ethernet TX Ports

Number of Gigabit Ethernet Ports

00 = not supported

Uplink Port Configuration

2T1 = 2 x Twisted Pair TX, RJ45, 100 Mbit/s

2Z6 = 2 x SFP Slots, 100 Mbit/s

Port Configuration

TT = 2 x Twisted Pair TX, RJ45, 100 Mbit/s

Temperature Range

S = 0 °C to + 60 °C

T = - 40 °C to + 70 °C

E = - 40 °C to + 70 °C Conformal Coating

Power Supply

DD = 2 x 12 to 48 V DC, 24 V AC

Approvals

Z9 = CE, FCC, EN 61131, EN 60950

Y9 = CE, FCC, EN 61131, EN 60950, UL 61010-1/-2-210

Pre-Configuration

HM = Fast MRP

HP = PRP

HH = HSR

HD = DLR

Software Configuration

E = Standard

Software Level

2S = HiOS Layer 2 Standard

Software Version

XX.X = Current Software Release