



**Product:** RED25-2TX/2SFP

**Configurator:** RED25-2TX/2SFP

### Configurator Description

Cost-effective Fast Ethernet redundancy entry-level switch supporting PRP and HSR, fast recovery with DLR, RSTP and MRP. This switch is offered in two, four-port versions: Four FE TX ports or two FE TX ports, plus two FE small form-factor pluggable (SFP) ports.

### Technical Specifications

#### Product description

Type	RED25-2TX/2SFP (Product Code: RED25-04002Z6TT-TDDY9HPE2SXX.X.XX)
Description	Managed, Industrial Switch DIN Rail, fanless design, Fast Ethernet type, with enhanced Redundancy (PRP, Fast MRP, HSR, DLR), HiOS Layer 2 Standard
Part Number	942137003
Port type and quantity	4 ports in total: 2 x 10/100 Mbit/s Twisted Pair / RJ45; 2 FE-SFP slot

#### More Interfaces

Power supply/signaling contact	1 x 6-pin connector
V.24 interface	1 x RJ11 socket
USB interface	1 x USB to connect auto-configuration adapter ACA22-USB

#### Network size - length of cable

Twisted pair (TP)	0 - 100 m
Single mode fiber (SM) 9/125 µm	see SFP fiber module M-Fast SFP-xx
Single mode fiber (LH) 9/125 µm (long haul transceiver)	see SFP fiber module M-Fast SFP-xx
Multimode fiber (MM) 50/125 µm	see SFP fiber module M-Fast SFP-xx
Multimode fiber (MM) 62.5/125 µm	see SFP fiber module M-Fast SFP-xx

#### Network size - cascading

Line - / star topology	any
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#### Power requirements

Operating Voltage	12-48 VDC (nominal), 9.6-60 VDC (range) and 24 VAC (nominal), 18-30 VAC (range); (redundant)
Power consumption	9 W
Power output in BTU (IT)/h	31

#### Software

Switching	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, Flow Control (802.3X), Egress Interface Shaping, Ingress Storm Protection, VLAN (802.1Q), VLAN Unaware Mode, Voice 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)
Redundancy	Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), RSTP 802.1D-2004 (IEC62439-1), RSTP Guards Fast MRP (IEC62439-2), High Availability Seamless Redundancy Protocol (HSR) (IEC62439-3), Parallel Redundancy Protocol (PRP) (IEC62439-3)
Management	Dual Software Image Support, TFTP, SFTP, SCP, 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, 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, System Information, Self-Tests on Cold Start, 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 ACA21/22 (USB), HiDiscovery, 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, Denial-of-Service Prevention, 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 , Password change on first login
Time synchronisation	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles	EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), ModbusTCP, PROFINET IO Protocol

Ambient conditions

MTBF (Telecordia SR-332 Issue 3) @ 25°C	6 468 913 h
Operating temperature	-40-+60 °C
Note	IEC 60068-2-2 Dry Heat Test +85°C 16 Hours
Storage/transport temperature	-40-+85 °C
Relative humidity (non-condensing)	10-95 %

Mechanical construction

Dimensions (WxHxD)	47 mm x 131 mm x 111 mm
Weight	320 g
Mounting	DIN rail
Protection class	IP20

Mechanical stability

IEC 60068-2-6 vibration	1 mm, 2 Hz-13.2 Hz, 90 min.; 0.7 g, 13.2 Hz-100 Hz, 90 min.; 3.5 mm, 3 Hz-9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz-150 Hz, 10 cycles, 1 octave/min
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks

EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD)	8 kV contact discharge, 15 kV air discharge
EN 61000-4-3 electromagnetic field	35 V/m (80-2700 MHz); 1 kHz, 80% AM
EN 61000-4-4 fast transients (burst)	4 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line IEEE1613: power line 5 kV (line/earth)
EN 61000-4-6 Conducted Immunity	3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)
EN 61000-4-16 mains frequency voltage	30 V, 50 Hz continous; 300 V, 50 Hz 1 s

EMC emitted immunity

EN 55022	EN 55032 Class A
FCC CFR47 Part 15	FCC 47CFR Part 15, Class A

Approvals

Basis Standard	CE, FCC, EN61131
Safety of industrial control equipment	UL 61010-2-210

Scope of delivery and accessories

Accessories	Rail Power Supply RPS 15/30/80/120, Terminal Cable, Industrial HiVision, Auto configuration adapter (ACA 22)
Scope of delivery	Device, terminal block , General safety instructions

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