

Cleerline Industrial Switch

1 x SFP to 2 x RJ45 Gigabit Switch with PoE



The SSF-1x2-RUGGED is a 2 port Gigabit Ethernet 10/100/1000Base-TX to 1000Base-X non-managed Industrial Ethernet Switch. This switch also provides PoE+ 30W per port power. It is designed with a hardened case for use in extreme operating temperatures (-40 to +75°C). The rugged metal housing is IP40 rated and intended to withstand mechanically or electrically extreme environments.

This industrial switch features strong surge protection (4kV ~ 8KV) per port and is compliant with IEC and EN standards for industrial grade equipment.



FEATURES AND BENEFITS

- DC power input block 48-52V
- Extreme operating temperature: -40 to 75°C
- Rugged IP40 rated metal casing, DIN rail bracket
- Store and Forward switching mechanism
- Reversed power polarity protection
- Auto-Negotiation & Auto MDI/MDI-X on every RJ45 port
- Supports 6kV surge protection per port on all TP ports for PoE models
- Supports IEEE 802.1Q Tag VLAN pass thru
- Redundant DC power inputs on every model
- 60W total PoE power budget: 30W 802.3af/at per port

OPERATION & DETAILS

Operating Temperature	-40 ~ 75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal, IP40 Protection
Dimensions	88 x 35 x 120mm (D x W x H)
Weight	0.44kg
Installation Mounting	DIN Rail mounting or wall mounting

APPLICATION EXAMPLE



PART NUMBER	DESCRIPTION
SSF-1x2-RUGGED	Industrial grade PoE 60W budget 2x 10/100/1000Base-Tx to 1000Base-X SFP converter, 802.3af/at compatible, DC48V required for PoE, DIN rail mountable

SPECIFICATIONS

GENERAL	
IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE 802.3ab 1000Base-T and 1000Base-X Gigabit Eth. IEEE 802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric): 10 Gbps
Data Processing	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control
Provides Broadcast Storm Protection	Present
MAC Address Table	4K
Packet Buffer Size	1MB
Ports	2 x RJ-45 1 x 1000Base-X SFP slot 10/100/1000Base-TX auto negotiation speed Auto MDI/MDI-X function, Full/Half duplex
Network Cable	10Base-T: 2-pair UTP/STP Cat.5 cable 100Base-TX: 2-pair UTP/STP Cat. 5 cable 1000Base-T: 4-pair UTP/STP Cat. 5e cable EIA/TIA-568 100-ohm (100m)
Protocols	CSMA/CD
LED	Per unit: PWR (Green) LNK/ACT (Green - Fiber port status and activity) Per Port: Link/Active (Green), Speed/100 (Yellow)

POWER, PoE, ALARM, TERMINAL BLOCK	
Reverse Polarity Protection	Present
Overload Current Protection	Present
Power Supply	Redundant Dual DC 48V (48~52VDC) Input power (Removable Terminal Block)
PoE Specs	PoE+ PSE device: IEEE 802.3af/at, up to 30W per port 60W total PoE budget
Power Consumption	<65W (at full PSE capacity)
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A@24VDC, NC
Removable Terminal Block	Provide 2 Redundant power, Alarm relay contact, 6 Pin

RATINGS	
EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A EN61000-6-4 – Emission for industrial environment
EMS	EN61000-6-2 – Immunity for Industrial environment EN61000-4-2 (ESD) Level 3, Criteria B EN61000-4-3 (RS) Level 3, Criteria A EN61000-4-4 (Burst) Level 3, Criteria A EN61000-4-5 (Surge) Level 3, Criteria B EN61000-4-6 (CS) Level 3, Criteria A EN61000-4-8 (Magnetic Field) Level 3, Criteria A
Traffic Control	NEMA-TS2
Rail Traffic	EN50121-4
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
MTBF	120,000Hrs
Warranty	2 years

DIMENSIONS

