

NE10001-20842B

10G Copper EN50155 L2 Managed PoE Industrial Switch



Product Features

- 2*10/100/1000/10GBase-TM12copperuplinkports,
- 8*10/100/1000Base-TM12copperdownlinkports
- 8 downlink Gigabit copper ports support PoE/PoE+/PoE++, compatible with IEEE802.3af/at/btstandards
- Each PoE/PoE+/PoE++ port can supply upto 15W/30W/60W
- Supports ERPS/RSTP & X-Ring Self-healing Ring
- Supports IEEE 802.1X, supports secure access management, enhancing network security

Product Overview

The NE10001-20842B is a 2*10G Copper+8*GE Copper L2 managed Industrial Ethernet Switch specially designed for rail transportation. This product meets the EN50155 industry standard requirements and complies with the IEEE 802.3af/at/bt protocol standards. The Ethernet interface adopts a sturdy and reliable M12 format, making it suitable for scenarios with severe vibrations and impacts. This series of switches has a working temperature range of -40°C to +80°C and features an IP68-rated shell and LED indicators, making it a plug-and-play industrial-grade device. With its exceptional waterproofing and ruggedness, it can adapt to various harsh environments, providing users with a reliable and convenient solution for networking their Ethernet devices. Adopting a wall-mount installation method, it can meet the needs of different application sites.

Product Specifications

Series	NE10001-20842B	
Ports	2 * 10/100/1000/10G Base-T(X) M12 copper X coded female Ethernet ports	
	8 * 10/100/1000 Base-T(X) M12 copper X coded female Ethernet ports	
	Automatic detection, full/half duplex MDI/MDI-X self adaptive	
	1 * M12 Input power port(dual power redundancy)	
Ethernet Standards	IEEE 802.3: 10Base-T Ethernet; IEEE 802.3u: 100Base-TX Fast Ethernet; IEEE 802.3ab: 1000Base-T Gigabit Ethernet IEEE 802.3an: 1000Base-T Gigabit Ethernet IEEE 802.3x: Follow Control	
Certification	EN50155	
MTBF	300,000 hours	
Warranty	3 years	
Industry Standards	EMI	FCC Part 15 Subpart B Class A,EN 55022 Class A
	EMS	IEC(EN)61000-4-2(ESD): ± 8kV touch discharge, ± 15kV air discharge
		IEC(EN)61000-4-3(RS): 10V/m(80~1000MHz)

		IEC(EN)61000-4-4(EFT) : power cable: $\pm 4\text{kV}$ Data cable: $\pm 2\text{kV}$;
		IEC(EN)61000-4-5(Surge) : power cable: $\pm 2\text{kV CM//}\pm 4\text{kV DM}$; Data cable: $\pm 4\text{kV}$
		IEC(EN)61000-4-6(Radio frequency conduction) : 3V(10kHz~150kHz),10V(150kHz~80MHz)
		IEC(EN)61000-4-16(Common-mode conduction) : 30V cont. 300V,1s
		IEC(EN)61000-4-8
	Shock	IEC 60068-2-27
	Free Fall	IEC 60068-2-32
	Vibration	IEC 60068-2-6

Switching Parameters

Transmission Method	Store and forward
Backplane Bandwidth	56G
MAC capacity	16K
Switching Latency	$<10\mu\text{s}$
Cache	2 Mbit
Power Consumption	$<5\text{W}$

Working Temperature

Working Temperature	$-40\sim 80^{\circ}\text{C}(-40\sim 176^{\circ}\text{F})$
Storage Temperature	$-40\sim 85^{\circ}\text{C}(-40\sim 185^{\circ}\text{F})$
Relative Humidity	5%~95% without condensation

PoE Features

PoE Standards	IEEE802.3af/ IEEE802.3at/ IEEE802.3bt
PoE Ports	8 ports supports PoE++, automatically detects the standards of devices like IEEE802.3af , IEEE802.3at and IEEE802.3bt
Output Power	IEEE 802.3af: max. 15.4W/port
	IEEE 802.3at: max. 30W/port,
	IEEE 802.3bt: max. 90W/port,
	Total maxW:200W
POE Priority	When power $>200\text{w}$, POE priority: port No.8>port No.7>port No.6 and so on

Power Parameters

Input Voltage	DC48V
Access Terminal	M12 A male port
Power Protection	Supports dual power supply redundancy Supports reverse polarity protection

Mechanical Features	
Shell	Aluminum enclosure
Installation Method	Wall mounted
Cooling Method	Natural cooling, fanless
Weight	1.13kg
Size	186 x 121 x 30mm
LED Indication	
Power Indicator	PWR
Interface Indicator	Copper ports(Link/ACT)

Mechanical Diagram

Size: 186 x 121 x 30mm

