Industrial Unmanaged PoE Switch With PoE Injector

CUE-500
CUE-500E

Features

High Performance Network Switching Technology

- ✓ Comply with IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3af
- ✓ Provides 5 x 10/100 Mbps Ethernet ports with RJ-45 connector
- ✓ Embedded 4 port PoE injector function classified as PSE
- ✓ Supplies 15.4 watts of power per port full load with PoE
- ✓ RJ-45 port supports auto MDI/MDI-X crossover
- ✓ Provides broadcast storm protection
- ✓ Supports IEEE 802.3x flow control on full duplex, back pressure on half duplex

Robust Industrial Design

- ✓ Robust aluminum case complying to IP-30 housing standard
- ✓ Supports operating temperature -10 to 70℃ & extended temperature -40 to 80℃
- ✓ DIN-Rail, panel mount or desktop installation
- ✓ High level of immunity to electromagnetic interference & power supply surges typically found in industrial plant environments or external curb side enclosures

Reliable Power Design

- ✓ Supports redundant 48VDC power input
- ✓ Supports 4,000 VDC Ethernet ESD protection
- ✓ Provides surge (EFT) protection 3,000 VDC for power line
- ✓ Overload current reset-table fuse
- ✓ Power polarity reverse protection
- ✓ Removable terminal block

Overview

The Cobra CUE-500 is an Industrial 5-port Slim Unmanaged Power over Ethernet Switch. It supports four PoE injector ports classified as power source equipment (PSE). CUE-500 provides 15.4 watts of power per port and can be used to power IEEE802.3af compliant powered devices (PD) by CAT5 cable and eliminates the need for additional power wiring. The compact, slim line switch is equipped with a relay output for an event alarm for easy troubleshooting. It offers 48 VDC redundant powers input design and is secured with power polarity reverse protection and an overload current reset-table fuse. The IP-30 housing protection, wide operating temperature of -10 to 70℃ and DIN-Rail mounting makes CUE-500 suitable for an industrial environment. The E version has wider temperature range of -40 to 80 ℃ The CUE-500 is a plug-and-play solution for your Power over Ethernet applications.

Hardware Specifications

Interface

RJ-45 Ports: 5 10/100Base-TX auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X

LEDs:
P1, P2, P-Fail
10/100TX: Link/Activity, Duplex/Collision

Power Input: VDC 48V
Redundant power with removable terminal block

Power Protection: Power reverse polarity

Power Consumption: 65 watts (full load)

Dimensions: IP-30 standard, 30 mm (W) x 140 mm (H) x 95 mm (D)

Installation: DIN-Rail, panel mounting or desktop

Environmental

Operating Temp: Regular: -10 to 70℃
Extended: -40 to 80℃

Storage Temp: -40 to 85℃ (-40 to 185℉)

Operating Humidity: 5% to 90% RH (non-condensing)

Technical Specifications

Standard:
IEEE802.3 10BASE-T
IEEE802.3u 100BASE-TX
IEEE802.3x Flow Control and Back pressure
IEEE802.3af Power over Ethernet

Protocol Technology: CSMA/CD

Switching Architecture: Store and Forward

Network Media:
10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable
EIA/TIA-568 100-ohm (100m)
100Base-TX: 2-pair UTP/STP Cat. 5/5e cable
EIA/TIA-568 100-ohm (100m)

Performance

Data Transfer Rate:
14,880 pps for Ethernet port
148,800 pps for Fast Ethernet port

MAC Address: 1k

Memory Buffer: 512Kbytes

Back-plane: 1.0 Gbps

Transfer Packet Throughput: 1.19Mpps @ 64bytes

Regulatory Approvals

EMI: FCC Class A

EMS:
EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11

Safety: UL, cUL, CE/EN60950

Shock: IEC60068-2-27

Vibration: IEC60068-2-6

Free Fall: IEC60068-2-32

Class 1 DIV 2: Pending*

DNV: Pending*

Environmental: WEEE, RoHS

MTBF: 325,000 hrs based on Mil-Hdbk-217F, GB

Warranty: 5 years

PoE Specifications

PoE Compliance: 100% IEEE 802.3af compliant

PoE Classification: Power Sourcing Equipment (PSE)

PoE Voltage: 48 VDC

PoE Power: Up to 15.4 watts per port

PoE Protection:
Over-temperature, over-current, over/under-voltage and transient

PoE Pin Assignment:
RJ-45 port # 1~# 4 support IEEE 802.3af End-point, Alternative B mode.
Positive (VCC+): RJ-45 pin 1, 2.
Negative (VCC-): RJ-45 pin 3, 6.
Data (1,2,3,6)