

**CUE-500-PD**

## 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 ports PoE injector function classified as PSE
- ✓ Supplies 15.4 watts of power per port full load with PoE
- ✓ Supports installation as powered device
- ✓ RJ-45 Port support auto MDI/MDI-X crossover
- ✓ Provides broadcast storm protection

### Robust Industrial Design

- ✓ Robust aluminum case complying to IP-30 housing standard
- ✓ Supports operating temperature -10 to 70°C
- ✓ 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 24VDC power input
- ✓ Supports 6,000 VDC Ethernet ESD protection
- ✓ Provides surge (EFT) protection 3,000 VDC for power line
- ✓ Power polarity reverse protection



## Overview

The Cobra CUE-500-PD is an Industrial 5-port Slim Unmanaged Power over Ethernet Switch with power input of DC 24V. It supports installation as power device environment. CUE-500-PD is equipped with four PoE injector ports classified as power source equipment (PSE) which 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. For power protection, CUE-500-PD is secured with 3000 VDC EFT protection, 6000 VDC Ethernet ESD protection, power polarity reverse protection and an overload current reset-table fuse. The IP-30 housing protection, wide operating temperature of -10 to 70°C and DIN-Rail mounting makes CUE-500-PD 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:

Per unit: Power 1 (Green), Power 2 (Green), P-Fail (Red)  
Per port: Link/Activity (Green), Full duplex/Collision (Amber)  
PoE: Feeding Power (Green)

### Power Input:

VDC 24V

**Power Protection:** Power reverse polarity

**Power Consumption:** 65 watts

**Dimensions:** IP-30 standard, 48.6 mm (W) x 140 mm (H) x 95 (D)

**Installation:** DIN-Rail, panel mount or desktop

### Environmental

**Operating Temp:** Regular: -10 to 70°C

**Storage Temp:** -40 to 85°C (-40 to 185°F)

**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

**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)