



# PD-20W

# PoE PD Interface

Users Guide

# Calypso Systems PoE PD Interface Device User Guide v1.0

**Table of Contents**

**INTRODUCTION ..... 3**

**CONFIGURATION ..... 4**

**SPECIFICATIONS ..... 5**

**WARRANTY STATEMENT ..... 6**

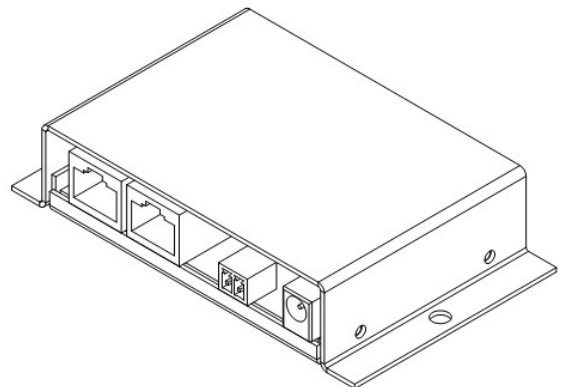
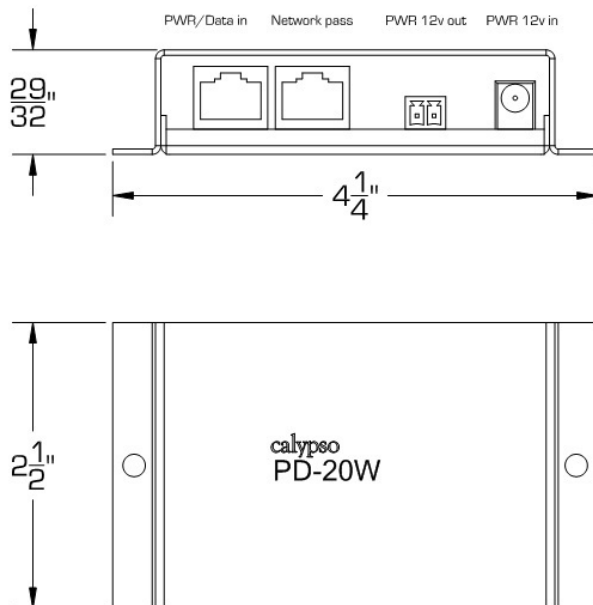
## Introduction

The PD-20W is a power over Ethernet (PoE) powered device (PD). Power is supplied to the PD-20W using two of the four pair of wires in the CAT5 cable. Both Midspan (Mode 'B') and Endpoint (Mode 'A') power options are supported. The PD-20W converts a high voltage (44V to 57V) low current received from power source equipment (PSE) device to a lower voltage higher current output used to power Calypso System products.

The PD-20W power supply converts the PoE power to 11.2V and will supply up to 1.34A (15 Watts).

The PD-20W monitors if an auxiliary power supply is attached and automatically switches over from PoE power to the auxiliary power when the AUX power is on. Normally the PoE power is on a battery backed up UPS. If the auxiliary power goes down, the PD-20W will automatically switch to the PoE power without interruption. The auxiliary power supply is usually a 12V 3.5A power adapter needed to supply the higher current needed for audio amps (CM-3000, CA-1000 and CM-800S).

Two indicator LEDs are present on the RJ-45 NETWORK+PoE connector to signal if PoE Power is enabled (Yellow) and if 12V Output is active (Green).



## **Configuration**

No configuration is required for this product.

## SPECIFICATIONS

### Hardware:

- Aluminum Case dimensions: 4.25" (108mm) x 2.5" (63.5mm) x .914 (23.2mm)
- Ethernet jacks: RJ45 (2), NETWORK+PoE\_IN and NETWORK\_OUT
- Power Output: 2 position, 3.81mm terminal block header, Pin 1 – 12VDC, Pin2 – GND
- AUX Power Input: Power Jack, 2.5mm, 12VDC, center pin +.
- Status LEDs: Located on RJ45 connector. Yellow (48V PoE active), Green (12V out active)

### Hardware:

- RJ-45 (Connector 1) - NETWORK+PoE\_IN
  - Pin1 – TX+ (GND or -48V for MODE 'A')
  - Pin2 – TX- (GND or -48V for MODE 'A')
  - Pin3 – RX+ (GND or -48V for MODE 'A')
  - Pin4 – PoE DC+ (typically GND for MODE 'B')
  - Pin5 – PoE DC+ (typically GND for MODE 'B')
  - Pin6 – RX- (GND or -48V for MODE 'A')
  - Pin7 – PoE DC- (typically -48V for MODE 'B')
  - Pin 8 – PoE DC- (typically -48V for MODE 'B')
- RJ-45 (Connector 2) - NETWORK OUT
  - Pin1 – TX+
  - Pin2 – TX-
  - Pin3 – RX+
  - Pin4 – N/A (AC terminated)
  - Pin5 – N/A (AC terminated)
  - Pin6 – RX-
  - Pin7 – N/A (AC terminated)
  - Pin 8 – N/A (AC terminated)
- 2Pin 3.81mm Terminal Block Header - Power Out (PoE: 11.2V, 1.34A max. AUX: 11.7V, 3.5A)
  - Pin 1, Power +
  - Pin 2, Power GND
- Power Adapter Jack – Power Input, 2.5mm pin, center +
  - Pin, Power +,
  - Sleeve, Power GND

# Warranty Statement

This Non-Transferable warranty is provided to original purchasing end user, herein referred as “customer”, of Calypso Systems product line defined as: WCM-RF, CA-1000, CB-50, CB-75, CB-85, CB-2000, CM-800, CM-800S, CB-5000, CM-3000, CMP-500, Conductor, CSD-500, CP-450, CP-650, Encore!, ION-LT2, Maestro, TB-1, TB-5, TB-6, TB-8, and PD-20W herein referred as “product”. This warranty is applicable to product sold or distributed to customer by an authorized Calypso Systems Dealer, OEM, Value Added Reseller or sold directly to the end user by Calypso Systems, LLC. This warranty becomes effective from the moment the end user completes purchase and receives product. This warranty shall remain in effect for 3 years from the moment of purchase as long as the original customer of the product continues to own and use the product. This warranty does not apply to accessories such as power supplies and cables, which carry standard 12-month manufacturer warranties.

## Terms

Calypso Systems warrants that product shall be materially free of defects in material and workmanship under normal use and service during the warranty period. In the event that Calypso Systems receives notice from the customer during the warranty period that product does not conform to this warranty, Calypso Systems shall, at its sole option, either repair or replace the non-conforming product. The warranty on the replacement or repaired product shall continue for the duration of the original warranty. All returned product becomes the property of Calypso Systems.

## Procedures

A product may only be returned with the prior written approval of Calypso Systems. Such approval shall reference a Return Material Authorization number (RMA) issued by authorized Calypso Systems technical support personnel. Transportation costs, if any, incurred in connection with the return of a defective item to Calypso Systems shall be borne by the Customer. Transportation costs incurred in connection with the re-delivery of a repaired or replaced item to the Customer shall be borne by Calypso Systems. However, such costs shall be borne by the Customer if Calypso Systems, reasonably determines that the product is not defective. If Calypso Systems determines, in its sole discretion, that the allegedly defective product is not covered by the terms of the warranty provided hereunder, or that a warranty claim is made after the warranty period, the cost of repair by Calypso Systems, including all shipping expenses, shall be reimbursed by the Customer. Calypso Systems shall have no liability with respect to data contained in any system returned to Calypso Systems.

## Exclusions

The foregoing warranties and remedies are for the Customer’s exclusive benefit and are non-transferable. Any and all warranties shall be void regarding System components that are damaged or rendered unserviceable by: (1) acts or omissions of non-Calypso Systems personnel; (2) misuse, theft, vandalism, fire, water, or other peril; (3) alterations of or additions to the System or any element thereof performed by personnel not certified by Calypso Systems to perform such alterations and additions or (4) the Customer’s failure to operate the product in conformance with Calypso Systems published operating parameters, including environmental specifications.

## Disclaimer of Warranty

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