

**NEW**

# Unity Low Voltage Monitor

Digital Battery Monitor and Alarm with Low Voltage Disconnect Integrates Rack Mount Rectifiers into a Fully Functional Power System.



This 1RU assembly contains numerous DC control and monitoring features that integrate power and distribution components into a highly functional system. Built in features include: low voltage disconnect, digital monitor of voltage and amperage, battery disconnect breaker, and alarm contacts. The digital display monitors bus voltage, battery voltage, system output current, and low voltage connect/disconnect set points. Alarm contacts actuate on low voltage and battery disconnect conditions. Rear panel bus bars provide ample terminal landings for easy integration with rack mount rectifiers, distribution panels and batteries.

## Features:

- Digital monitor displays system bus voltage, battery voltage, total rectifier amperage, and connect/disconnect voltage set points, and system ambient temperature
- For use with 12, 24, and -48V systems
- Solid state (FET) low battery voltage disconnect with adjustable set points and manual over ride switch for system maintenance/testing, with adjustable low battery alarm contact alerting to impending system shutdown
- 100 amp battery disconnect breaker for system protection and easy testing and maintenance
- Form C alarm contacts
- All these functions in a compact 1 RU unit, minimizing system rack space

## Electrical

**Nominal System Voltage:** 12, 24 or 48 VDC

**Voltage Range:** 8 to 65 vdc

**Grounding:** Positive or Negative (polarity insensitive)

**Maximum Continuous Current:** 100 Amps DC

**Battery Breaker:** 100 Amps with handle guard

**Low Voltage Battery Disconnect:** 100 Amp, solid state (FET)

**LVD Set Points and Adjustment Range:**

VDC	Disconnect	Connect	Adj. Range
12V	10.4V	12.2V	10-16V
24V	21.0V	24.5V	20-30V
48V	42.0V	49.0V	40-60V

## Mechanical

**Chassis:** Aluminum, black powder coat

**Terminals:** Plated copper. Landings for up to three rectifier inputs, with separate battery bus

**Rack Size:** 19" or 23", 1U

**Cooling:** Convection

**Dimensions:** 1.75" H x 19/23" W x 11" D

**Weight:** 6.25 Lbs.

## Environmental

**Operating Temperature range:** 0 to +60°C

## Indicators/Adjustments/Alarms

**Meter: Display (via front panel selector switch)**

- DC volts
- DC Amps
- LVD thresholds: Connect & Disconnect
- Ambient Temperature
- Adjustable brightness
- Default settings restore feature

**Meter Power Source Selector Switch:** Rectifier/Battery allows meter read if loss of AC or DC power

## Alarms/Indicators:

- Form C alarm contact activates on LVD Open or Battery Breaker trip
- Form C low battery alarm contact activates on LVD pre-disconnect condition
- Front panel red LED activates on any alarm condition

## Protection

**Battery:** 100 amp circuit breaker

**Reverse Polarity:** Polarity insensitive design

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