

APRS World, LLC specializes in data logging and control equipment primarily for the renewable energy industry. To learn more about this product or any of our other products, please visit us online at:

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APRS World's **DL300 Series Dump Controller and Load** is an integrated solution designed to prevent 12 or 24 volt batteries from overcharging. It is designed to be used with small wind, solar, or hydro systems. The **DL300** is compact and easy to install. It incorporates a 300 watt resistor / heater and controller board in a stout 18 gauge powder coated steel enclosure.

Specifications:

Operation

- PWM (Pulse Width Modulation) for highest charging performance without flicker
- Selectable three stage charging or over voltage protection mode
- · Selectable for sealed or flooded batteries using jumper
- · Status and fault indicator LEDs

Connections

- #10-32 brass screws for V+ and V-
- Two 1/2" / 3/4" concentric NPT knockouts and two 1/2" NPT knockouts

Mounting

- Mounts to vertical concrete, metal, drywall, or other non-flammable surface.
- Uses four #10 screws
- Body sits 19mm out from wall
- NEMA 1 enclosure for indoor mounting

Weight and Dimensions

- Dimensions: 88mm wide, 95mm tall, 470mm long (3.375 x 3.75 x 18.5 in)
- Weight: 1.94 kg (4.28 pounds)
- Shipping Dimensions: 102 x 108 x 508 mm (4.0 x 4.25 x 20 in)
- Shipping Weight: 2.15 kg (4.75 pounds)

Materials

- Enclosure: 18 gauge mild steel, powder coated black
- Circuit board: FR-4, 1.6mm (0.062 in), double sided, plated through holes, solder mask, silk screen, gold plating
- Hardware: stainless steel, zinc plated steel, aluminum, and Nylon
- Shipping carton: corrugated cardboard

LED Signals

- Voltage Protection Mode:
 - dumping: red solid
- · Charging Mode:

bulk: green blink - long delay - green blink

absorb: green blink - short delay - green blink

float: green solid

dumping: red solid when duty cycle > 0%

Power, 12 volt version, DL300-12

- Operating voltage range: 7 to 32 volts DC
- Recommend fuse or circuit breaker: 30 amps
- · Integrated load resistor: 0.75 ohm, 300 watt, wire wound
- Quiescent current when not load dumping: 2.6mA @ 12 volts

Power, 24 volt version, DL300-24

- Operating voltage range: 7 to 32 volts DC
- · Recommend fuse or circuit breaker: 15 amps
- Integrated load resistor: 3 ohms, 300 watt, wire wound
- Quiescent current when not load dumping: 3.0mA @ 24 volts

Voltage Set Points			
Туре	Mode	12V	24V
Flooded	Bulk	14.6	29.2
	Float	13.4	26.8
	Protect	16.0	32.0
Sealed	Bulk	14.3	28.6
	Float	13.4	26.8
	Protect	15.0	30.0

DL300 - Dump Controller & Load

DL300-12 Part Number: APRS8400
DL300-24 Part Number: APRS8401
Shipping Weight: ≤ 2.15 kg / 4.75 lb
RoHS: compliant

