**FLEXmax 100**

**Included in Package**
- FLEXmax 100 Charge Controller
- 2 x Mounting Bracket
- Silicone Grease Package
- Cooling Fan (outdoor-rated)
- MicroSD Card (already installed)

**Dimensions**
- Height: 18.6" (47.2 cm); with fan 22.06" (56.0 cm)
- Width: 8.8" (22.4 cm)
- Depth to Wall: 6.0" (15.2 cm)

**Mounting**
- The FLEXmax 100 must be mounted upright at least 36" (91.4 cm) above the ground or floor. Shade is recommended when installing outdoors.
- Conduit hubs must be connected to the conduit before connecting to the FLEXmax 100.
- Conduit should be 1" size (1⅜" actual diameter).
- Clearance requirements are a minimum of 6" (15.2 cm) above and below the controller.
- The unit can be mounted using either brackets (see steps 1 through 4 in A) or keyhole slots (see B) on a secure mounting surface. Follow the numbered steps.
- The cooling fan must be installed prior to operation. It should be installed after mounting the controller.

**LED Indicators and FLEXmax 100 Symbols**

**Date and Revision**
October 2018, Revision D

**NOTES:**
- Unit output is derated above 25°C (77°F)
- Not intended for use with life support equipment.
Wiring

**DC LEGEND**

- **Negative**
- **Positive**
- **Ground**

**IMPORTANT:** Before powering up the controller

The rapid shutdown terminals are left disconnected at the factory. The FLEXmax 100 will not power up until terminals 1 and 3 in C are connected together. See the back page for more information.

- Tighten all wire lugs and ground terminals to 4 Nm (35 in-lb) torque.
- Use copper wiring only (rated 90°C or higher). Refer to the NEC and other electrical codes for PV array cable sizing, length, and ampacity.
- Use #4 AWG (25 mm²) wire (minimum) for the controller output terminals to the batteries. They can accept up to #2 AWG (35 mm²).
- Use #6 AWG (16 mm²) wire (maximum) for the ground terminals.
- Negative-ground installation is depicted here. (The bond is shown in D.) Positive grounding is also permitted, but special arrangements are required.
- External disconnect and overcurrent protective devices must be sized and provided by the installer. For input circuit breakers, OutBack offers 40 Adc to 80 Adc devices. For the output, OutBack offers either 100 Adc or 125 Adc devices.
- This product supports the following nominal battery systems:
  - 24 volts
  - 36 volts
  - 48 volts

**IMPORTANT:** Example only

Actual wiring may vary from the system depicted here. All configurations must comply with local and national electrical codes. Consult the local electric authority to ensure compliance.

**CAUTION:** Equipment Damage

When installing multiple controllers or the OutBack GFDI, follow all instructions shown in the Owner’s Manual.

**CAUTION:** Equipment Damage

Do not use a power sheath or other power tools to tighten wire terminals. This can damage them.

**WARNING:** Burn Hazard

The heat sink can become hot when the charge controller is operating. Use caution when touching it during operation.

**NOTE:** See the FLEXmax 100 Owner’s Manual for more notes on all topics above. This also includes installation of rapid shutdown devices, multiple controllers, and ground fault operation (GFDI).