

# Eliminate the guesswork from battery charging.

Bogart Engineering



If your RV, home or boat depends on batteries for electrical power, here's why we think the TM-2030 battery system monitor would be an excellent choice.

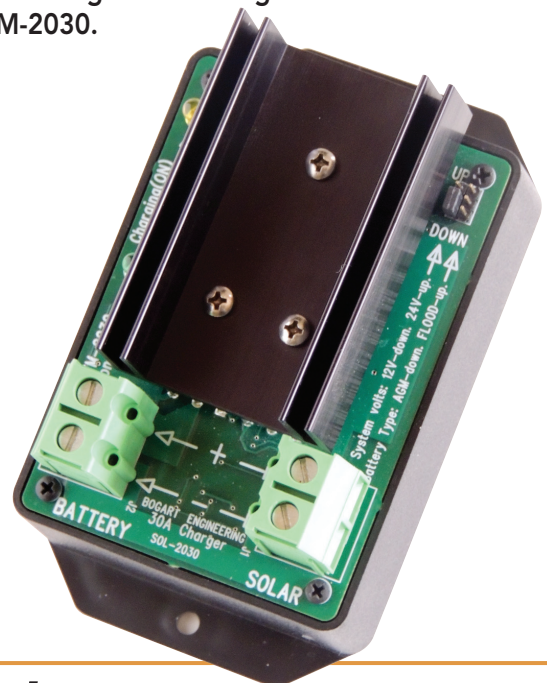
If you plan to use solar power, the SC-2030 Solar Charger works closely with the TM-2030 to provide high quality charging to maximize the life of your batteries.

## TRIMETRIC TM-2030 BATTERY MONITOR

- Most popular choice for monitoring off-grid homes, RV's or boats.
- All models show volts, battery charging and discharging amps, percent full based on measured amp hours— and more.
- Simple data logging focuses on identifying system problems.

## SC-2030 SOLAR CHARGER

- Designed to work with the TM-2030 TriMetric monitor for unusually precise charging in accordance with battery manufacturer recommendations.
- Can return a measured amount of amp hours— and also has a higher voltage, current regulated finish charge to avoid battery undercharge or overcharge.
- All settings and readings are accessed from the TM-2030.



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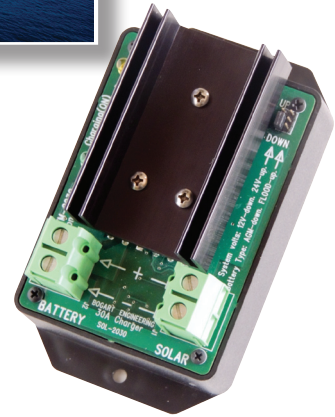
## TRIMETRIC TM-2030 BATTERY MONITOR

For better usage and care — answers the important questions about your deep cycle batteries.

- ✓ Is my charger still doing the job right?
- ✓ How much energy do my lights, or the microwave take?
- ✓ How full are my batteries?
- ✓ Why isn't my system working as well as before?
- Uses "amp hour" method of tracking "state of charge" for better accuracy than voltage methods.
- See instantaneous draw or charging amount (amps or watts.)
- Compatible with any charging system or solar controller.
- Audible low battery alarm based on Amp hours and battery voltage.
- Minimal targeted history data for experts to diagnose system problems.
- Shows replaced percentage of last discharge.
- 12-48V systems. 50-10,000 amp hour systems.
- Warranty four years.
- Manufactured in USA.
- Works to give unusually accurate Solar charging with our new SC-2030 PWM charger.
- Two slightly different physical styles: Surface mount "RV" or flush mount "A".
- Lightning resistant design.
- Requires installation of a shunt in your battery system.

## SC-2030 SOLAR CHARGER

When used with the TM-2030, it has unusual charging features for better solar charging.



- ("Amp hour counting") Provides charging based on replacing an adjustable percentage of previous discharge amount to avoid undercharge or overcharge.
  - ("IUI Charging") Performs a regulated current, higher voltage finish charge: beneficial for solar charging to safely get more charge in the batteries during a limited solar day.
- Other benefits:**
- Completely controllable from TM-2030 Monitor.
  - TM-2030 shows: solar current, battery temperature, and extra unused watts available from solar panels in the afternoon when batteries are not absorbing all solar energy.
  - Communicates with TM-2030 by ordinary 4 wire telephone cable.
  - 31 amps max charging. OK with panels with more amps, then limits current to less than 31A.
  - All types of batteries: Wet cell, AGM, Gel.
  - Optional temperature compensation
  - Compact design: 5-1/4 x 3 x 2-3/4 inches deep.
  - Works "standalone" with very basic charger functions.
  - PWM type for 12-24 systems. So called "12V" or "24V" panels should be used with this (or any) PWM charger for maximum efficiency, for about the same efficiency as MPPT chargers, but at lower cost and complexity.
  - Download SC-2030 Solar Charger instructions for more details.

*Our website outlines installation requirements, and explains in detail each item above and why they are useful, for both technical and less technical users.*

*Go to "news and updates", "brochure information" at:*

***bogartengineering.com***