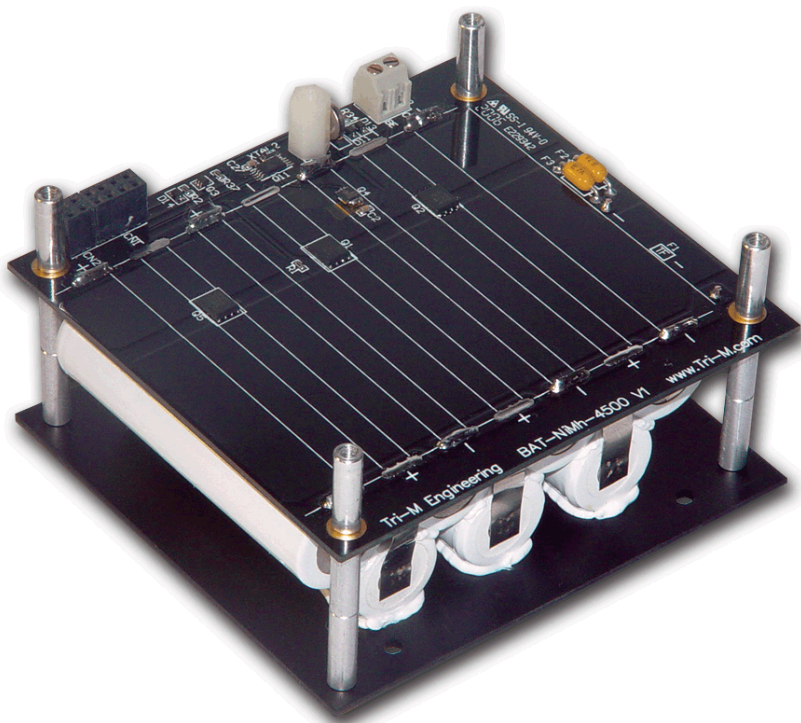


BAT-NiMh45

Battery Backup Module for HESC, V5SC & HPSC Series Power Supplies



features

- Capacity 4500 ma-hr @ 8.4V nominal
- Energy backup of 37.8 watt-hr.
- PC/104 footprint size.
- Available with built-in RTC
- Input for a "dry" contact to wake HESC out of hibernation
- Digital I2C temperature sensor for detecting battery temperature

specifications

Electrical Specifications

- Batteries: NiMh, Size A, 4.5A-Hr.
- Nominal Battery Voltage: 8.4 volts (seven cells * 1.2 volts)
- Maximum Capacity: 37.8 watt-hours
- Max Charging Current 4.0A
- Max Charging Voltage 19.5V

Environmental

- Charging Temperature Range 0°C to 45°C
- Discharge Temperature Range -10°C to 64°C

Mechanical

- PC/104 footprint size: 3.55" x 3.775", no PC/104 bus
- Weight: 521 grams (including mounting hardware)

information

The **BAT-NiMh45** creates a UPS system by plugging directly into the bottom of the HESC (including the V5SC-SER & HPSC) Vehicle Power Supplies. Each **BAT-NiMh45** includes seven 4.5Ahr "A" size batteries for a nominal backup voltage of 8.4 volts. The **BAT-NiMh45** can therefore supply a total of 37.8 watt-hrs of backup power and supply backup power for up to sixty minutes for a 37.8 watt load.

The **BAT-NiMh45** includes Mosfet transistors for preventing deep discharge occurrences during extended power outages. The Mosfet transistors electrically isolate the **BAT-NiMh45** from the HESC whenever the BE output of the HESC is de-asserted (pulled to 5V).

When ordered with the Real Time Clock option, the **BAT-NiMh45-RTC** can "awaken" from Sleep Mode at a programmed start-up time. A momentary "dry" contact on CN3 can also override the Sleep Mode and awaken the **BAT-NiMh45-RTC**. Tri-M Power supplies supporting the HESC-UPS18 firmware can program and read the RTC on the **BAT-NiMh45-RTC**. Tri-M Power Supplies with HESC-UPS firmware can use the **BAT-NiMh45** for a UPS system, but without RTC support. Refer to section "Configuration and Installation" for listing of compatible power supplies and firmware support.

The **BAT-NiMh45** has both a thermal fuse and a current fuse for protection against overcharging, and shorts on the battery output.

A digital I2C temperature sensor provides temperature feedback for charge termination, which can be read by the HESC.

Ordering Information



this product is
manufactured by:

TRI-M
ENGINEERING

Part Number

BAT-NiMh45

Description

Battery Backup Module for HESC, V5SC & HPSC Series
Power Supplies