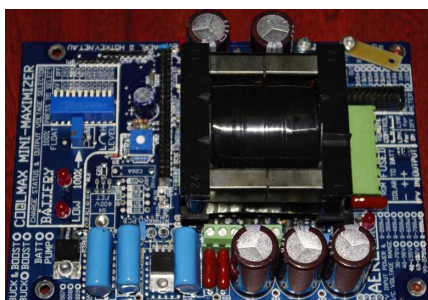


1 PRODUCT OVERVIEW

AERL RACEMAX 600B

A high current, high efficiency, boost-only race-trim maximum power point tracker.



FEATURES:

- High 98 – 99% operating efficiency.
- Compatible with all types of solar cells and battery arrays.
- Passive cooling & no moving parts results in highly reliable operation to 50°C .
- Output voltage options of 72, 96, 120, 144, 168V.
- Compact and lightweight design, weighing only 750g.
- Charges higher voltage battery packs from lower voltage solar arrays.



Australian Energy
Research Laboratories Pty Ltd

PRODUCT DATASHEET

RACEMAX 600B
Australian Energy Research Labs
AER02.001 – ver 2
30 March 2010

2 MODEL SPECIFICATIONS

Performance Data

| Symbol | Parameter | Max |
|----------------|--|------|
| T_{amb} | Maximum ambient air temperature | 50°C |
| $I_{sc-const}$ | PV panel short circuit current - constant | 6A |
| $I_{sc-trans}$ | PV panel short circuit current – transient | 8A |

Electrical Characteristics

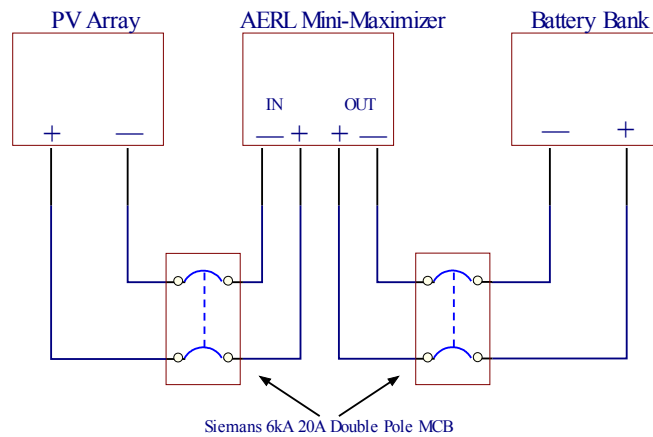
| Symbol | Parameter | Min | Max |
|------------|------------------------------------|------------------------|------|
| P_{mp} | Solar panel peak power | 0W | 600W |
| V_{oc} | PV panel open circuit voltage | 40V | 135V |
| η | Efficiency @ 6A, 100Vmp, & 25°Camb | 98.00% | - |
| V_{Batt} | Battery Voltage (Selectable) | 72, 96, 120, 144, 168V | |

Physical Characteristics

| Parameter | Typical |
|------------------------|-------------------|
| Weight | 720g |
| Dimensions (L x W x H) | 170 x 120 x 65 mm |

3 CONNECTION DIAGRAM

0 - 120V OUTPUT



120 - 180V OUTPUT

