

“Want extra miles on a single charge”
GO SOLAR



Bitmap Image



Increases Mileage upto 25 to 30%

Extra Income



Easy to Install

Enhanced Battery Life



ROYCO Presents Solar Energy Maximizer with IEC & it's unique technology!

The device, known as the Intelligent Energy Controller (IEC), mounted at the individual panel level is a unique technology that boosts the efficiency in terms of extra kms/day for E-Vehicles, thus extending the per day life of the vehicle and battery by reducing the Depth of Discharge in the battery. The following are some of its distinct advantages.

1. Very high efficiency, 97%
2. Harvests the energy at the Module level, hence over comes very practical and real losses such as dust accumulation, shadow effects, bird droppings, cabling losses, and other such debris that might hamper maximum insolation.
3. Being a parallel connection, during any failure in the array due to losses mentioned above, it will affect only one unit and rest will yield the energy unlike in a Serially connected array.
4. Soiling / shadow will affect only the covered area and rest of the module will still generate the power.
5. In case of a failure in one MPPT in an array, it will be restrict to that module and remaining will still deliver the power.
6. Offers 10% more energy with the same array as compared to a centralized MPPT. Easy to & maintain.
7. The DoD (Depth of Discharge) & maintenance in the battery can be minimized and life expectancy of the battery can be enhanced with the adoption of this technology.



TECHNICAL SPECIFICATIONS

INPUT	
Input Power Module Rating	300-330 Wp
MPPT operating range	20-5 V DC
Maximum Input Current	8 Amps
Reverse Polarity Protection	Yes
OUTPUT	
Output Voltage range	42 - 60 V DC
ENVIRONMENTAL	
Operating Temperature Range	10 - 50 C
Relative Humidity	0 - 100%
FIRE AND SURGE PROTECTION	
Relative Humidity	HV DC Output Turn off > 80 C case
Surge Protection	Surge Absorber above 450V
COMPLIANCE	
EMC	Meets FCC Part 15 Class B, IEC 61000-6-2, IEC 61000-6-3
Safety	Meets UL 1741, IEC 62103 (class 2)
Protection Rating	IP65 Outdoor use, NEMA 3R
Material	Aluminum - UI94
MECHANICAL	
Dimensions in mm	220 (L) x 125 (W) x 35 (H) (INCLUDING ANTENNA SKT)
Weight	0.65 kg
Mntg Hole Pitch in mm	125mm
EV SUITABILITY CHART WITH IEC & SOLAR	

Sr.No	Operation Timing	On Road Condition on Panel	Suitability with Solar
1	08 AM - 06 PM	Shadow Free	Best Suitable
2	08 AM - 06 PM	Partial Shadow	Suitable
3	10 AM - 8 PM	Shadow Free	Suitable
4	10 AM - 8 PM	Partial Shadow	Less Suitable
5	10 AM - 10 PM	Shadow Free	Less Suitable
6	10 AM - 10 PM	Partial Shadow	Not Suitable

SunGain

Add-on Solar Power Backup
for Rickshaw

NOTE*: Royco's Solar Energy Maximizer Solution is most effective and best suited for operational running under ideally sunny and clear weather conditions. Output efficiency may vary/reduce depending upon any other insolational obstacles/barriers such as darkness, rain, cloud, fog etc.