Orca

RENEWABLE ENERGY · PRODUCT BROCHURE

MPPT SOLAR CHARGE CONTROLLERS

Guard Series

Maximum Solar Harvest

Dedicated MPPT controllers that ensure maximum solar harvesting efficiency and safe battery charging.



20 A	30 A	40 A	60 A
OR-MP20	OR-MP30	OR-MP40	OR-MP60

>98%
Charging efficiency, multi-stage

20–60 A
Four current ratings

250 VDC
Max PV input voltage (OR-MP60)

Li + PbA
Automatic battery detection

OVERVIEW

Get more from every solar panel

Orca Guard MPPT controllers ensure maximum solar harvesting efficiency and safe battery charging, with a compact, industrial-grade design built for high-temperature environments.

An advanced MPPT algorithm keeps your panels working at their best power point, while multi-stage charging and automatic battery detection protect lead-acid and lithium batteries alike.

Why Guard

- Advanced MPPT algorithm
- High PV input voltage support
- Greater than 98% charging efficiency
- Multi-stage battery charging
- Lead-acid & lithium battery support
- Comprehensive electronic protections

APPLICATIONS

Ideal for

Standalone Solar Systems
The charging heart of a self-contained solar setup.

Solar Battery Charging
Safe, efficient charging of your battery bank from PV.

Off-Grid Solar Projects
Dependable power where there is no grid at all.

Guard Series

MPPT SOLAR CHARGE CONTROLLERS

Orca

KEY FEATURES

Engineered for maximum solar harvest

Advanced MPPT Algorithm

Maximum power point tracking extracts the most energy from your panels, with high PV input voltage support.

High Charging Efficiency

Greater than 98% efficiency with multi-stage battery charging.

Automatic Battery Detection

Detects battery voltage automatically and supports both lead-acid and lithium batteries.

LCD Display

Real-time charging and battery parameters at a glance.

Comprehensive Protection

Electronic protection for the panel, the controller and the battery.

Industrial-Grade Design

Compact build with reliable performance in high-temperature environments.

MODEL RANGE

Choose your rating

MODEL	CHARGE CURRENT	SYSTEM VOLTAGE	MAX PV VOLTAGE	BATTERY TYPE
OR-MP20	20 A	12 V / 24 V	230 VDC	Lead-acid / Lithium
OR-MP30	30 A	12 V / 24 V	230 VDC	Lead-acid / Lithium
OR-MP40	40 A	12 V / 24 V	230 VDC	Lead-acid / Lithium
OR-MP60	60 A	24 V / 48 V	250 VDC	Lead-acid / Lithium

Choose the rating from your PV array current and battery system voltage. Contact Orca for system sizing and detailed technical datasheets.

IDEAL FOR

Where Guard fits

- ✓ Standalone solar systems
- ✓ Solar battery charging
- ✓ Off-grid solar projects

Planning a solar system?

Share your panel and battery details, and our team will recommend the right Guard controller.

Phone 0484 455 3853 · +91 89434 04505
Email info@orcapowers.com
Web www.orcapowers.com