

EC-MPPT45A / 60A / 80A

PV Charge Controller MPPT

General specifications-Indoor models

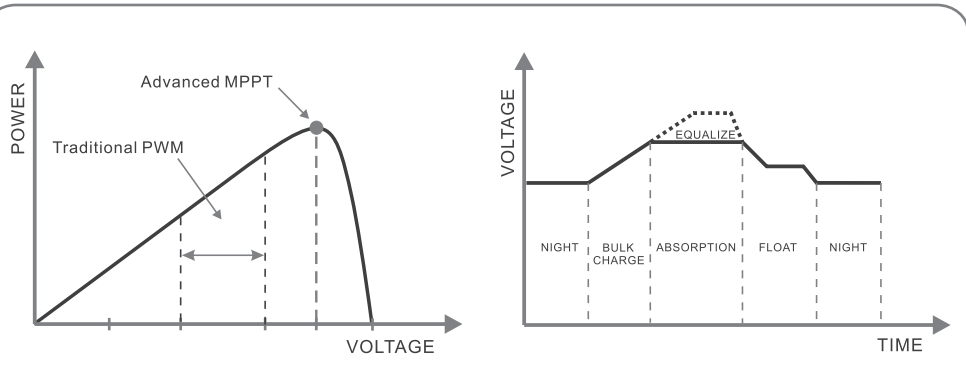
- EC-MPPT45
- EC-MPPT60
- EC-MPPT80

Benefits

- ▶ Advanced MPPT control technology
- ▶ Fully automatic four-stage charge control
- ▶ High efficiency up to 99%
- ▶ High reliability with extensive electronic protections
- ▶ Data logging and networking capability
- ▶ Natural convection or intelligent cooling fan
- ▶ Relay driver for load control



MPPT Technology and Battery Charging Algorithm



Advanced MPPT technology maximizes PV output power, thus enhances energy harvest up to 30% more.

Automatic four-stage charge control and temperature compensation algorithm significantly extends battery lifespan.

| MODEL | EC-MPPT45 | EC-MPPT60 | EC-MPPT80 |
|------------------------------------|---|---|--|
| ELECTRICAL PARAMETERS | | | |
| Nominal Battery Voltages | 12/24/48 VDC (Manual or Automatic selection) | | |
| Maximum Charge Current | 45 A | 60A | 80A |
| Maximum Input Voltage | 150 VDC | | |
| Self Consumption | 2 Watt typical | | |
| Power Conversion Efficiency (max.) | 99% | | |
| Charging Algorithm | Four Stages: Bulk, Absorption, Float, Equalize | | |
| Battery Temperature Compensation | -5mV/cell/°C (25°C) | | |
| Nominal Maximum Input Power | 12 VDC systems 600W 24 VDC systems 1200W 48 VDC systems 2400W | 12 VDC systems 800W 24 VDC systems 1600W 48 VDC systems 3200W | 12 VDC systems 1060W 24 VDC systems 2120W 48 VDC systems 4240W |
| PROTECTION | | | |
| PV Panel | Reverse polarity, Overload, Short circuit, Over voltage | | |
| Battery | Over voltage, Undervoltage, Over current, Over temperature | | |
| System | Inrush current, Reverse current | | |
| MECHANICAL PARAMETERS | | | |
| Dimensions (W X H X D ,mm) | 164X310X123 | | 164X370X123 |
| Weight(kg) | 4.5 | | 6 |
| Standard Warranty | 3 | | |
| GENERAL PARAMETERS | | | |
| Operating Temperature Range | -25°C to +45°C | | |
| Storage Temperature | -40°C to +70°C | | |
| Humidity | 0~98% non-condensing | | |
| Environmental Rating | IP 20 | | |
| COMMUNICATION | | | |
| RS-485 | Yes | | |
| RS-232 | Optional | | |
| LED Display | Yes | | |
| LCD Display | Optional | | |
| OTHER FUNCTION | | | |
| Load Control | Yes | | |
| Parallel Operation | Yes | | |