

MPPT 100/30 (30 A)

Maximum Power Point Tracker



- Maximum Power Point Tracking technology increases the efficiency of your PV system
- Less expensive solar-panels for gridfeed-in systems can now be used for 12/24 V off-grid systems
- Electronic protection (reverse polarity, over-current, short-circuit, overtemperature)
- High efficiency
- DIN rail compatible
- Negative grounding

With innovative maximum-power-point-tracking technology, Phocos' MPP-Tracker ensures maximum performance from your solar array at all times and in all weather conditions. The MPPT can yield an energy gain from your PV array (up to 30%). When a Central Unit is used, up to 8 MPPTs can be used together in one system. The charge regulation is then done via data bus by the Central Unit. This will enable

you to increase your system capacity substantially.

The temperature-compensated three-stage I-U curve charge regulation algorithm significantly extends the lifespan of your battery. The possibility to use less expensive grid-feed-in solarpanels with up to 95 V open circuit voltage for 12 V or 24 V stand-alone systems will significantly reduce the cost of the total system.

| Type | MPPT 100/30 |
|--------------------------------|--|
| Nominal voltage | 12/24 V, automatic recognition |
| Nominal battery charge current | 30 A |
| Max. PV voltage | 95 V |
| Min. PV voltage | 17/34 V |
| Max. PV input power | 450 W@12 V, 900 W@24 V |
| Max. battery charge current | 33 A |
| Power conversion efficiency | Up to 98% |
| Standby power consumption | < 30 mW at 12 V system voltage (< 2 mA); < 80 mW at 24 V system voltage (< 3 mA) |
| Temperature compensation | -24 mV/K (12 V); -48 mV/K (24 V) |
| Max. wire size | 35 mm ² |
| Dimensions (W x H x D) | 185 x 150 x 115 mm |
| Weight | 1.6 kg |
| Temperature range | -40 °C to +50 °C |
| Type of protection | IP22 |
| Float charge | 13.8/27.6 V (25 °C) |
| Main charge | 14.4 V/28.8 V (25 °C), 0.5 h (daily) |
| Boost charge activation | 14.4/28.8 V (25 °C), 2 h battery voltage < 12.3/24.6 V |
| Equalization activation | 14.8/29.6 V (25 °C), 2 h battery voltage < 12.1/24.2 V |
| Max. battery voltage | 32 V |
| Grounding | Negative grounding |
| Battery type | Lead acid (GEL, AGM, float) |

Datasheet_MPPT 100/30_1/1_e_2013-07-29_Subject to change without notice