EESOLAR-6/10KTL-M1

# Smart Energy Controller

## Active Safety

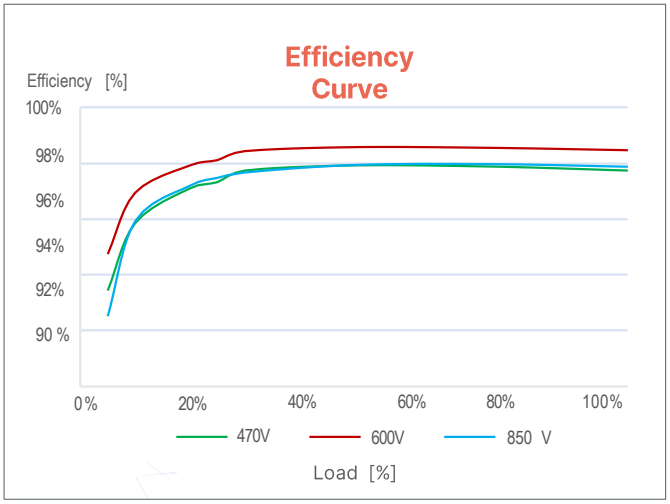
AI Powered
Active Arcing Protection

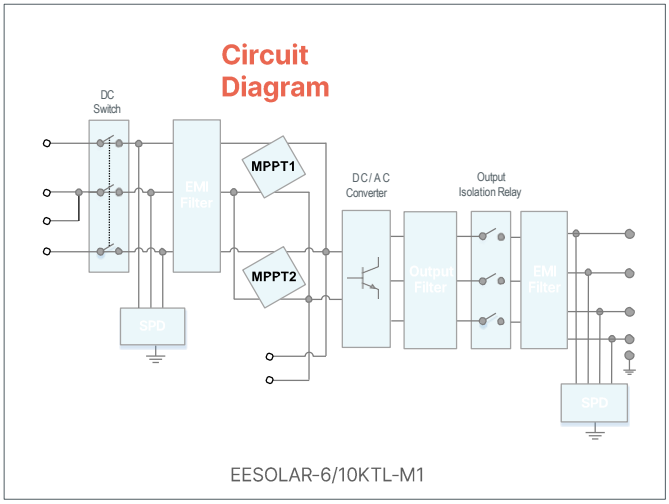
## Higher Yields

Up to 30% More Energy
with Full Optimizer

## Flexible Communication

WLAN, Fast Ethernet




EESOLAR-6/10KTL-M1

# Technical Specification

| Technical Specification | EESOLAR-6KTL-M1 | EESOLAR-10KTL-M1 |
|---|---|---|
| **Efficiency** | | |
| Max. Efficiency | 98.6% | 98.6% |
| European Weighted Efficiency | 97.7% | 98.1% |
| **Input (PV)** | | |
| Recommended Max. PV Power | 9,000 W p | 15,000 W p |
| Max. Input Voltage [1] | 1,100 V | |
| Operating Voltage Range [2] | 140 V ~ 980 V | |
| Start-up Voltage | 200 V | |
| Rated Input Voltage | 600 V | |
| Max. Input Current per MPPT Max. Input Current per MPPT | 13.5 A | |
| Max. Short-circuit Current | 19.5 A | |
| Number of MPP Trackers Number of MPP trackers | 2 | |
| Max. Number of Inputs | 2 | |
| **Input (DC Battery)** | | |
| Compatible Battery | EESTORE Battery System 5kW h – 30kW h | |
| Max Number of Connected Battery | 2 | |
| Operating Voltage Range | 600 V ~ 980 V | |
| Max Operating Current | 16.7 A | |
| Max Charge Power | 10,000 W | |
| Max Discharge Power | 6,000 W | 10,000 W |
| **Output** | | |
| Grid Connection | Three-phase | |
| Rated Output Power | 5,000 W | 6,000 W | 8,000 W | 10,000 W |
| Rated AC Apparent Power | 5,000 VA | 6,000 VA | 8,000 VA | 10,000 VA |
| Max. Apparent Power | 5,500 VA | 6,600 VA | 8,800 VA | 11,000 VA |
| Rated Output Voltage | 230 Vac / 400 Vac, 3W / N+PE | | | |
| Rated AC Grid Frequency | 50 Hz / 60 Hz | | | |
| Max. Output Current | 8.5 A | 10.1 A | 13.5 A | 16.9 A |
| Adjustable Power Factor | 0.8 leading ... 0.8 lagging | | | |
| Max. Total Harmonic Distortion | ≤ 3 % | | | |
| Backup Power Output | Yes (via compatible Backup Box) | | | |
| **Features & Protections** | | |
| Input-side Disconnection Device | Yes | |
| Anti-Islanding Protection | Yes | |
| DC Reverse Polarity Protection | Yes | |
| Insulation Monitoring | Yes | |
| DC Surge Protection | Yes, compatible with TYPE II protection class according to EN/IEC 61643-11 | |
| AC Surge Protection | Yes, compatible with TYPE II protection class according to EN/IEC 61643-11 | |
| Residual Current Monitoring | Yes | |
| AC Overcurrent Protection | Yes | |
| AC Short-circuit Protection | Yes | |
| AC Overvoltage Protection | Yes | |
| Arc Fault Protection | Yes | |
| Ripple Receiver Control | Yes | |
| Integrated PID Recovery [3] | Yes | |
| Battery Reverse Charging from Grid | Yes | |
| **General Data** | | |
| Operating Temperature Range | -25 ~ + 60 °C (-13 °F ~ 140 °F) | |
| Relative Operating humidity | 0 % RH ~100 % RH | |
| Operating Altitude | 0 ~ 4,000 m (13,123 ft.) (Derating above 2000m) | |
| Cooling | Natural convection | |
| Display | LED Indicators; Integrated WLAN + App | |
| Communication | RS 485; WLAN/Fast ethernet via EEDongleA-05; | |
| Weight (incl. Mounting Bracket) | 17 kg (37.5 lb) | |
| Dimension (incl. Mounting Bracket) | 525 x 470 x 146.5 mm (20.7 x 18.5 x 5.8 inch) | |
| Degree of Protection | IP 65 | |
| Country of Manufacture | China | |
| **Optimizer Compatibility** | | |
| Compatible Optimizer | SUN2000-600W-P/SUN2000-450-P2[4] | |
| **Standard Compliance (more available upon request)** | | |
| Safety | RCM, IEC 62109 -1, IEC 62109 -2, AS/NZS 60947.3:2015 | |
| Grid Connection Standards | AS/NZS 4777.2:2020, AS/NZS 4777.2:2015 | |

*1 The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter. Please limit input voltage to maximum 600V dc for residential application according to AS 4777.1 2016.
*2 Any DC input voltage beyond the operating voltage range may result in inverter improper operating.
*3 EESOLAR-6/10KTL-M1 raises potential between PV- and ground o above zero through integrated PID recovery function to recover module degradation from PID. Supported module types include: P-type (mono, poly).
*4 Please consult the suppliers for the specifications of the optimizer pairing.