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| MPPT SUNRISE SPECIFICATIONS | | | | | | |
|  | **MPPT**  **12V-10A-LiFePO4-booST** | | **MPPT**  **24V-10A-LiFePO4-booST** | **MPPT**  **36V-10A-LiFePO4-booST** | | **MPPT**  **48V-10A-LiFePO4-booST** |
| Topology | Boost | | Boost | Boost | | Boost |
| Rated Panel (Input) Current | 10 A | | 10 A | 10 A | | 10 A |
| Minimum Panel Voltage for Charging: | 5 V | | 5 V | 5 V | | 5 V |
| Maximum Input Panel Voltage | 65 V | | 65 V | 65 V | | 65 V |
| Maximum Recommended Panel Vmp | 13 V | | 26 V | 37 V | | 50 V |
| Max Solar Panel Power | 130 W | | 260 W | 370 W | | 500 W |
| Rated Battery Voltage | 12 V | | 28 V | 36 V | | 48 V |
| CV Voltage | 15.2 V | | 30.4 V | 41.8 V | | 57 V |
| Charge Profile: | CC/CV   * Medium Cell Voltage * Max Cell Voltage from BMS by CAN BUS | | | |  | |
| Peak efficiency | 98% Typ. | | | |  | |
| MPP Tracking Efficiency | > 99%  (Perturb and Observe) | | | |  | |
| MPPT Tracking Speed | 100 ms | | | |  | |
| Operating Temperature | -40°C to 85°C | | | |  | |
| Self consumption | < 1 W | | | |  | |
| Type of power supply | * 12V (isolated DC\DC inside) (Optional) * Solar panel (Voc\_max 65V) * Battery (Default) | | | | | |
| Port I/O | | | | | | |
| Data Communication Port | * First CAN-bus Default not isolated, isolated available (Optional) ISO 11898-1 (1Mb max adjustable) * Second CAN-bus Optional (available isolated or not) ISO 11898-1 (1Mb max adjustable) for gate way node function | | | | | |
| Analog Input Signal\* | * Power supply +5V (max 20mA for channel) * 2 Channel (Temperature, Current, etc) | | | |  | |
| Digital Input Signal\* | 2 Channel active low (internal pull up resistance) | | | |  | |
| General Purpose Relay Contacts\* | * NC (max 10A, 30V resistive load) * NO (max 10A, 30V resistive load) | | | |  | |
| Protection | | | | | | |
| Battery Fuse | 20 A | | | |  | |
| Polarity inversion | Y | | | |  | |
| Over Temperature | Y (Adjustable) | | | |  | |
| Overload | Y (Adjustable) | | | |  | |
| Enclosure | | | | | | |
| Environmental Protection | * IP 22 * IP 65 (Optional) | | | |  | |
| Dimensions (h x w x d) | 146 x 96 x 38 mm (IP22)  148 x 94 x 34 mm (IP65) | | | |  | |
| Weight | 300 g | | | |  | |
| \* configurable for customer necessity | |  | | | | |