Technical specification

MPPT Solar Regulator 12/24 V

Tracer A, 30 A
Tracer A series adopts common positive design and advanced MPPT control algorithm. The products can track the MPP point fast and accurately in any situation which will improve energy efficiency and obtain the maximum solar energy.

Models:
- Tracer1210A 10 A, 12/24 V auto work
- Tracer2210A 20 A, 12/24 V auto work
- Tracer3210A 30 A, 12/24 V auto work
- Tracer4210A 40 A, 12/24 V auto work

Features:
- Advanced MPPT technology
- High tracking efficiency no less than 99.5%
- Peak conversion efficiency of 98%
- Ultra-fast tracking speed
- Accurately recognizing and tracking of multiple power point
- Multi-function LCD displays system information intuitively
- User programmable for battery types, load control etc.
- 3-Stage charge with PWM output
- Common positive grounding design
- RS485 port with industrial standard MODBUS open architecture
- Fully programmable function via PC software or remote meter

Electronic protections:
- PV reverse polarity protection
- PV short circuit protection
- PV over current alarm protection
- Battery overcharge protection
- Battery over discharge protection
- Battery reverse polarity protection
- Load short circuit protection
- Load overload protection
- Overheating protection
Load Set:

- Manual Control (ON/OFF)
- Light ON/OFF (Default)
- Light ON + Timer
- Time Control

Setting Operation:

There are two methods that can modify load mode and control parameter through infrared interface:

1. Remote meter, MT50
2. Super Parameter Programmer, SPP-02
   - This method can realize one-key setting operation which is suitable for bulk quantity products setting or applied in the projects.
3. PC monitoring setting software “Solar Station Monitor”
Optional accessories:

Remote meter
MT50

Remote temperature sensor
RTS300R47K3.81A

PC communication cable
CC-USB-RS485-150U

Super parameter Programmer
SPP-02

PC software:
## Technical Specifications:

<table>
<thead>
<tr>
<th>Model</th>
<th>Tracer1210A</th>
<th>Tracer2210A</th>
<th>Tracer3210A</th>
<th>Tracer4210A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal system voltage</td>
<td>12/24VDC auto work</td>
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</tr>
<tr>
<td>Rated charge current</td>
<td>10 A</td>
<td>20 A</td>
<td>30 A</td>
<td>40 A</td>
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<tr>
<td>Rated discharge current</td>
<td>10 A</td>
<td>20 A</td>
<td>30 A</td>
<td>40 A</td>
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<tr>
<td>Battery input voltage range</td>
<td>8 ~ 32 V</td>
<td>8 ~ 32 V</td>
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<td>8 ~ 32 V</td>
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<tr>
<td>Max. PV open circuit voltage</td>
<td>100 V (at minimum operating environment temperature) 92 V (at 25 °C environment temperature)</td>
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</tr>
<tr>
<td>MPP voltage range</td>
<td>VBAT +2 V ~ 72 V</td>
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</tr>
<tr>
<td>Max. PV input power</td>
<td>130 W (12 V) 260 W (24 V)</td>
<td>260 W (12 V) 520 W (24 V)</td>
<td>390 W (12 V) 780 W (24 V)</td>
<td>520 W (12 V) 1040 W (24 V)</td>
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<tr>
<td>Float charging voltage</td>
<td>13.8 V</td>
<td>13.8 V</td>
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<tr>
<td>Low voltage reconnect voltage</td>
<td>12.6 V</td>
<td>12.6 V</td>
<td>12.6 V</td>
<td>12.6 V</td>
</tr>
<tr>
<td>Low voltage disconnect voltage</td>
<td>11.1 V</td>
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</tr>
<tr>
<td>Self-consumption</td>
<td>≤ 20 mA/12 V ≤ 16 mA/24 V</td>
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</tr>
<tr>
<td>Temperature compensation coefficient</td>
<td>-3 mV / °C / 2 V (25 °C)</td>
<td>-3 mV / °C / 2 V (25 °C)</td>
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<td>-3 mV / °C / 2 V (25 °C)</td>
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<tr>
<td>Working temperature</td>
<td>-25 °C ～+45 °C</td>
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<tr>
<td>Enclosure</td>
<td>IP30</td>
<td>IP30</td>
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<td>IP30</td>
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<tr>
<td>Overall dimension</td>
<td>172 x 139 x 44 mm</td>
<td>220 x 154 x 52 mm</td>
<td>228 x 164 x 55 mm</td>
<td>252 x 180 x 63 mm</td>
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<tr>
<td>Power terminals</td>
<td>12 AWG (4 mm2)</td>
<td>6 AWG (16 mm2)</td>
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<tr>
<td>Net weight</td>
<td>0.6 kg</td>
<td>1.1 kg</td>
<td>1.2 kg</td>
<td>1.9 kg</td>
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</table>