Apollo Solar

TurboCharger

The TurboCharger T80 integrates Maximum Power Point Tracking, Battery Charge management, State of Charge Information and Communictions into a single device.

The T80 captures up to 35% more power from the solar (PV) array. The controller uses the same technology that Apollo Solar developed to help NASA harness additional power from their solar arrays.

The T80 has a 4 stage charging profile with fully adjustable set points for all parameters to support Flooded Lead Acid (FLA), GEL and Absorbed Glass Mat (AGM) Batteries.

The built-in energy monitor tracks energy production and consumption and displays the energy remaining in the battery.

The T80 produces full rated power without temperature derating up to 40C. This means that full power output can be maintained even in extreme temperature conditons, when it is most needed.

The 5 year Australian warranty is backed up with Si Clean Energy full technical support & Authorised Service Centre.

Si CLEAN ENERGY

T80 - T80HV

- High Speed MPPT Regulator
- Process up to 5300 watts of PV power
- 80 Amps continuous output at 40C
- Voc T80 150Vdc Voc T80HV 200Vdc
- Charges 12, 24, or 48 V Batteries
- Parallel Stacking Option
- Built-in battery energy monitor
- 5 years Warranty
- Made in the USA

SPECIFICATIONS

Output Current	80 amps Continuous @ 40° C
Battery Voltages	12, 24, 48 V DC
Max PV Input	70 amps
Max PV Array	5300 Watts
Max PV Open Circuit Voltage (VOC)	T80 = 150 Vdc T80HV = 200 Vdc
Warranty	5 Years Warranty
Charge Regulation	Programmable set points for Bulk, Absorption, Float with Auto or Manual Equalize.
MPPT Mode	Apollo patented algorithm recalculates the maximum power point each 2mS.
Battery Temperature Compensation	5.0 mV ℃ per 2 volt cell **(Temp. Comp. Sensor Included at no extra cost).**
DC to DC Conversion Capability	Charge 48v batteries with a 72, 84, or 96 Volt nominal array Charge 24v batteries with a 36, 48, 60, 72, 84, or 96 Volt nominal array Charge 12v batteries with a 24, 36, 48, 60 or 72 Volt nominal array
Power Conversion Efficiency	97% to 99% depending on array to battery voltage ratio (Highest efficiency at 60V array into 48V battery).
Unit Dimension (L x W x D)	387 mm x 216 mm x 111mm
Unit Weight	7.3 kg
Shipping Weight	10.4 kg
Shipping Dimensions	457 mm x 304 mm x330 mm
Conduit Knockouts	Generous cable access space and combi 20mm 25mm 32mm knockouts.
Environmental Rating	Indoor Type 1 (not intended for use in extremely damp or humid locations).
Operating Temperature Range	Min - 40℃ to max 55° C. Output current is automatically reduced above 40° C.
Display	Built-in back-lit 4 line LCD display (standard). Wireless remote display (optional).
Status Reporting	LCD Status screen displays: Input and Output volts and amps, Battery volts and amps, Charge mode and State of Charge (using external 50 mV/500 A shunt).
Data Logging	Logs energy harvested for 90 days. Data screens display kW hours, Watt hours, Amp hours and Float hours.
Energy Monitor	LCD shows: Battery SOC (state of charge) displayed with a fuel gauge style 20 segment bargraph plus percentage digital readout. E.g. E XXXXXXXXX…..F SOC 90%. **Battery shunt included at no extra cost.**
Aux Relays	2 x Independent Normally Open 50V DC @ 0.5 Amp relays, each fully programmable (inc. hysterisis) using SOC, voltage, current, temperature or time.
Specifications Notice	Specifications are subject to change without notice.
RRP **GST Inc**	

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