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TriStar MPPT 600V

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The TriStar MPPT 600V™ is a breakthrough in charge controller design. By accepting PV array input up to 600 Voc, it enables installers to design systems with longer, fewer strings, reducing cabling and hardware which make installation and wiring easier and faster. Morningstar's advanced digital engineering combined with superior thermal management make the TS-MPPT-600V with TrakStar technology the only charge controller in its class that doesn't require a cooling fan or fans, making it both extremely reliable and efficient (with 97.9% peak efficiency). Ideal for DC-coupled energy storage applications. Available in four versions:

TS-MPPT-60-600V-48: Standard

TS-MPPT-60-600V-48-DB: with Disconnect Box

TS-MPPT-60-600V-48-DB-TR: with DC Transfer Switch

TS-MPPT-60-600V-48-DB-TR-GFPD: Pre-wired with Ground Fault Protection Device

Models: TS-MPPT-60-600V-48, TS-MPPT-60-600V-48-DB

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+ Datasheets

+ Operation Manuals

MODBUS Document

Declaration of Conformity

Tech Support Files

String Sizer

Specifications and Certifications by Model

Model	TS-MPPT-60-600V-48	TS-MPPT-60-600V-48-DB	TS-MPPT-60-600V-48-DB-TR
Charge Rating	60 amps	60 amps	60 amps
Max. PV Open Circuit Voltage (Voc)	600 volts	600 volts	600 volts
Nominal Battery Voltage	48V, custom programmable to 24V, 36V, and 60V	48V, custom programmable to 24V, 36V, and 60V	48V, custom programmable to 24V, 36V, and 60V

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Model	TS-MPPT-60-600V-48	TS-MPPT-60-600V-48-DB	TS-MPPT-60-600V-48-DB-TR
Nominal max. Operating Power* – 48 volt battery	3200W	3200W	3200W
Peak efficiency	97.9%	97.9%	97.9%
Battery Voltage Range	16-72V	16-72V	16-72V
PV Input Operating Voltage Range	100V to Voc = 525V	100V to Voc = 525V	100V to Voc = 525V
Self-Consumption	1.75 – 2.50W	1.75 – 2.50W	1.75 – 2.50W
Transient Surge Protection	4500 Watts/port	4500 Watts/port	4500 Watts/port
Voltage Accuracy	< =0.1% +/- 100mV	< =0.1% +/- 100mV	< =0.1% +/- 100mV
Operating Temperature Range	-40 C to +45C	-40 C to +45C	-40 C to +45C
Warranty	5 Years	5 Years	5 Years
CE and RoHS compliant	✓ Yes	✓ Yes	✓ Yes
IEC 62109	✓ Yes	✓ Yes	✓ Yes
ETL Listed [UL-1741 and Canadian CSA C22.2 No.107.1.01]	✓ Yes	✓ Yes	✓ Yes
FCC Class B Part 15 Compliant	✓ Yes	✓ Yes	✓ Yes
Manufactured in a Certified ISO 9001 Facility	✓ Yes	✓ Yes	✓ Yes

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