

Morningstar New Product Overview

October 2015

--Company Confidential--

Input Synchronization of up to 4 TriStar MPPT-600V (Q4 2015)

High speed communications software to allow 4 controllers to track as one.

Controls up to 12kWp of PV or wind in one control scheme

Includes a network switch/power supply box

Wind Turbine Battery Charging using 600V MPPT (Q4-2015)

Verification of use of TriStar MPPT-600V for using wind turbines to charge batteries

Synchronization code for up to 4 controllers in parallel for up to 12kWp of wind

Retrofit Grid-tie with Battery Backup using 600Vdc Transfer Switch (Now Available)

"DC Transfer" battery backup solution for use with Grid-Tied Inverters

For new GT inverter system or retrofit of an existing GT PV system

Allow for manual switching of PV string from GT inverter to 600V MPPT charge controller during a grid outage

Double Pole, Double Throw (DPDT) Contactor Switch

Solar PV Power range =2-18kW; 600V max. Voc

Can be used with in conjunction with a standard 48V Inverter/Charger with an AC battery backup switching circuit to provide power during an outage in a simplified way with reduced cost compared to AC coupling.

Off-Grid Inverter Charger (Q2 - 2016)

Versions:

120VAC and 230VAC of all versions.

4kW, 48VDC, 70A charger Paralleling up to 2 units.

2kW, 24VDC, 70A charger Paralleling up to 2 units.

4kW, 24VDC: 140A charger (Q4-2016) - supports full parallel stacking and 3 phase.

8kW,48VDC:, 140A charger (Q4-2016) - supports full parallel stacking and 3 phase.

Features:

High frequency transformer design. Robust design, but lighter weight for shipping. Lower cost.

Will address the needs of both RE markets as well as backup in one unit.

Dual AC input.

Optional Shunt (future) and Relay Modules can be plugged in for gen relay or system metering.

High efficiency PFC charger.

Very wide input voltage range for charger. Can charge from poor quality grid.

200% surge

Integrated Meter Display that supports TS family for easy add-on of solar.

Enhanced surge protection on AC input using replaceable MOV module and fast acting TVS.

ProStar (PWM) Gen 3 upgrade (Q1 2016)

Update of our legacy ProStar controller

15A and 30A PV and load, with and without meter

RJ-11 for remote meter, data logging and adjustability

Lighting control standard; setup via meter

DIN rail mountable

MS Web Service (Q2 2016)

data logging to cloud server, data collected continuously from sites
supports any MS product with meterbus (RJ11 meter port)
Web based status, data and notification for systems
supports any type of network connection, no firewall issues
Highly scalable to support 1000's of simultaneous systems
TLS data encryption
bi-directional support for new setting push

TS MPPT High Power (Q4 2016)

80 and 100A of charging
Wall mount and Rack mount versions
High Speed Sync with our off-grid inverter (Charge sync, grid support response)
Full protections and code compliance (AF, GF, RS Integration)
30A integrated load control
Optional Logic Blocks add advanced features
-high resolution shunt
-relay control
-BMS interfaces
Advanced Data logger with Real Time Clock

Grid-tie Inverter with Battery Backup (Q3- 2017)

For residential grid-tie systems up to 6kW with battery backup
Optimized for higher efficiency and lower cost (and 1 inverter only)
Specifications and development schedule to be determined based on market needs

Ethernet Adaptor - Q1 2016

An accessory that enables Ethernet connectivity for any Morningstar product having a meterbus port
SS MPPT, SS Duo, TS PWM
Forward compatible with coming PS MPPT and PS PWM Gen 3
Live View webpages and data logging using any browser.
Access data over Ethernet with MSView or other device
Compatible with Morningstar's Web Monitoring Service (future)
DIN rail mountable
powered via meterbus port for 12,24 or 48V systems