Morningstar's SunGuard is the most advanced small, economical solar charge controller on the market today.

**SunGuard's technology provides:**
- Exceptional Reliability
- PWM Battery Charging
- Consistent High Quality
- Low Cost

The SunGuard is able to match the quality and performance of the world-leading SunSaver controllers because:
- SunGuards are made on the same high speed, automated production lines
- SunGuards use the same charging circuit
- SunGuards use the same high quality components

**Features:**
- ISO 9002 quality programs
- Series design (not shunt)
- 100% solid state
- True 0 to 100% PWM duty cycle
- Setpoint accuracy to 60 mV
- Temperature compensation
- Rated for 25% overloads
- No need to derate
- Lightning protected with 1500 W transorsbs
- Self-consumption is 6 mA
- Fully encapsulated in epoxy potting
- ABS plastic, impact-resistant case
- Outdoor rated, Hypalon connecting wires
Advanced PWM Battery Charging

Advantages
SunGuard’s PWM charging compared to On-Off solar regulators:

- Typically 30% more solar energy into the battery per day
- Average battery State-of-Charge is 90 - 95% compared to 55 - 60% for On-Off regulators

Mechanical Specifications
Wire size #16 AWG
ABS plastic case
Epoxy encapsulated
Weight is 3 oz (0.09 kg)

Electrical Specifications
Rated Solar Input 4.5 Amps
Max. Input (5 min.) 5.5 Amps
System Voltage 12 Volts
Max. Solar Voltage 30 Volts
Regulation Voltage 14.1 Volts
Accuracy 60 mV
Self-consumption 6 mA
Temp. Compensation -28 mV/°C
Reverse Current Leakage <10 μA
Operating Temperature - 40 to +85°C

WARRANTY: Five year warranty period. Contact Morningstar or your authorized distributor for complete terms.

AUTHORIZED MORNINGSTAR DISTRIBUTOR: