# Morningstar SunGuard 4.5A Solar Charge Controller



## Price: CAD \$69.00

#### **SKU**: MSSUNGUARD4

Product Categories: Charge Controllers, PWM : 4A-9A, Shop
Product Tags: <u>4.5A</u>, <u>canada</u>, <u>controller</u>, <u>morningstar</u>, <u>morningstar canada</u>, morningstar sunguard, <u>morningstar sunguard canada</u>, <u>regulator</u>, <u>sg-4</u>, <u>solar</u>, <u>solar</u> charge controller</u>, <u>solar controller</u>, <u>sunguard</u>, <u>sunguard canada</u>
Product Page:

https://www.modernoutpost.com/product/sunguard-solar-charge-controller/

## Product Summary

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# **Product Description**

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single module controller. Morningstar has combined all the advantages of their leading SunSaver charging circuit with less expensive packaging to provide an economical controller for small PV systems. The Morningstar SunGuard is the most advanced small, economical solar charge controller on the market today.

This is a very popular controller for use in stand-by, lighting, data/research, and mobile applications. It is built for 15+ year operational life, and is fully resin potted for extreme durability.

Can I use this controller with Lithium Iron Phosphate batteries? Short answer: No.

Morningstar does NOT recommend this controller with Lithium due to the inability to disable the temperature compensation feature. The regulation voltage of 14.1V is suitable for LFP, but LFP should not be charged below zero-C (without extreme care), and at high ambient temperatures it is possible to get outside your LFP battery's range.

Connectivity

If you'd like to have the controller pre-wired with waterproof connectors for use with <u>Powerfilm</u>] solar panels, it is <u>available here</u>]. We can also provide with <u>Anderson Powerpole</u>], <u>MC4</u>] if needed.

Morningstar SunGuard Key Features and Benefits...

- 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 transorbs -Self-consumption is 6 mA - Fully encapsulated in epoxy potting - ABS plastic, impact-resistant case - Outdoor rated, Hypalon connecting wires

SunGuard Mechanical Specifications...

- Wire size #16 AWG - ABS plastic case Epoxy encapsulated - Weight is 3 oz (0.09 kg) - Dimensions:  $6.4 \times 5.1 \times 3.8 \text{ cm} (2.5 \times 2.0 \times 1.5 \text{ in})$ 

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  $\mu$ A - Operating Temperature -40 to +85°C -Warranty: 5-Years

**Product Attributes** 

- Dimensions: 1 × 1 × 1 cm
- Weight: 0.3 kg

**Product Gallery** 

