MORNINGSTAR corporation

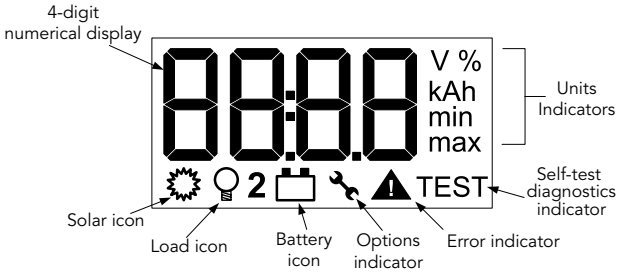
REMOTE METER™

Morningstar's ***Remote Meter (RM-1)*** is a universal, four digit display with custom icons that is compatible with several Morningstar controllers and inverters. This meter provides comprehensive system information for easy monitoring including voltage, current and temperature.

Key Features and Benefits:

Provides Important Information

The digital meter displays voltage, current, temperature, logged data, settings, alarms and error reporting for easy troubleshooting. Present, cumulative and maximums/ minimums are indicated. The LED's display battery level and operating state.



One or more icon and units indicators are displayed to indicate whether the numerical information relates to solar, load, battery 1 or 2, options, errors or self-test.

Mounting Options

In Wall Mount

Frame Mount

Back View

Easy to Install

Simply plugs into other Morningstar products via RJ-11 connector. May be mounted in the wall or on the wall using the included frame. Also includes 10 meters of wiring with RJ-11 connectors and mounting screws.

Simple to Use

Three soft buttons allow for simple navigation of the meter menus. Custom icons and back lighting make the meter easy to read and understand.

Low Self-Consumption

The Remote Meter was designed for low self-consumption to avoid draining the system batteries on even small solar systems. Self-consumption is 6 mA with backlight off and 15 mA with backlight on.

Adjustability

The temperature may be displayed in either °C or °F, the backlight timer may be adjusted for desired running time and the amp-hours and minimum/maximum values may be reset.

REMOTE METER™

Meter Displays

	SunSaverDuo Controller	SunSaver MPPT Controller	SureSine Inverter
Solar:			
Voltage		✔	
Current	✔		
Amp-Hours	✔		
Maximum Current	✔		
Battery:			
Voltage	✔*	✔	✔
Minimum Voltage	✔*	✔	✔
Maximum Voltage	✔*	✔	✔
Current		✔	
Amp-Hours	✔*	✔	
Watts		✔	
Load:			
Status (On / Off)		✔	✔
Current		✔	
Amp-Hours		✔	
Temperature (°C or °F):			
At Meter	✔	✔	✔
At Battery	✔**	✔**	
Other Features:			
Errors and Alarms	✔	✔	✔
Data Logging	**none**	**30 DAYS**	**none**

*for both Battery 1 and Battery 2
**when using remote temp sensor

TECHNICAL SPECIFICATIONS

Electrical

- **Self-consumption:**
  - **Backlight off** 6 mA
  - **Backlight on** 15 mA
- **Minimum Operating Voltage** 8 V

Mechanical

- **Connector type** RJ-11 (6 pin)
- **Faceplate dimensions** 9.5 x 9.5 cm / 3.8 x 3.8 in.
- **Faceplate material** Powder coated steel
- **Meter back dimensions** 7.4 cm / 2.9 in. diameter
  2.8 cm / 1.1 in. deep
  Fits 7.6 cm / 3 in. round hole
- **Frame dimensions** 11.4 x 11.4 x 3.5 cm
  4.5 x 4.5 x 1.4 in.
- **Frame material** PBT pastic
- **Meter cable** 10 m / 33 ft (6 conductor)
  May be extended to 30 m / 100 ft
- **Meter cable temp. rating** 60 °C / 140 °F
- **Meter weight** 135 g / 0.3 lbs

Environmental

- **Ambient Temperature** –20 °C to +60 °C
  –4 °F to +140 °F
- **Storage Temperature** –30 °C to +80 °C
  –22 °F to +176 °F
- **Humidity** 100% N.C.
  Printed circuit board is conformal coated

Certifications

- **CE Compliant**
- **RoHS Compliant**
- **Manufactured in a certified ISO 9001 facility**

Compatibility

- **SunSaver Duo controller**
- **SunSaver MPPT controller**
- **SureSine inverter**

The Remote Meter is available in a package with certain Morningstar products and is also sold separately.

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

AUTHORIZED MORNINGSTAR DISTRIBUTOR:

MORNINGSTAR corporation

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