

A89DC-08 Solar Current Monitor with Modbus Output



Description

Obvius, the leader in cost effective data acquisition and wireless metering solutions introduces the A89DC-08 Multi Circuit DC Monitor (MCDM). The MCDM allows owners and installers of DC generating applications to monitor the performance of each device individually by providing high accuracy current readings for direct current power flowing from said generators. Key features of this patent-pending monitor include:

- 8 non-contact Hall Effect current sensors provide ease of installation
- Modbus RTU RS 485 output for readings
- Automatic detection of failed panels or strings
- Real time readings of DC current levels for all DC generating devices

The A89DC-08 can be combined with additional Obvius products to provide a complete monitoring package for solar installations with "plug and play" ease of installation. Among the connectivity options:

- Inverters with Modbus output
- Net meters or other metering devices
- ModHopper™ transceivers for wireless Modbus communications
- Obvius wireless Modbus weather stations
- AcquiSuite™ data acquisition server

Data from the MCDM's (and other Modbus devices) can be sent from the AcquiSuite to the Obvius BMO web hosting site, allowing the user to see interval data graphically using any web browser (e.g. Internet Explorer or Firefox).

Installation is fast and easy

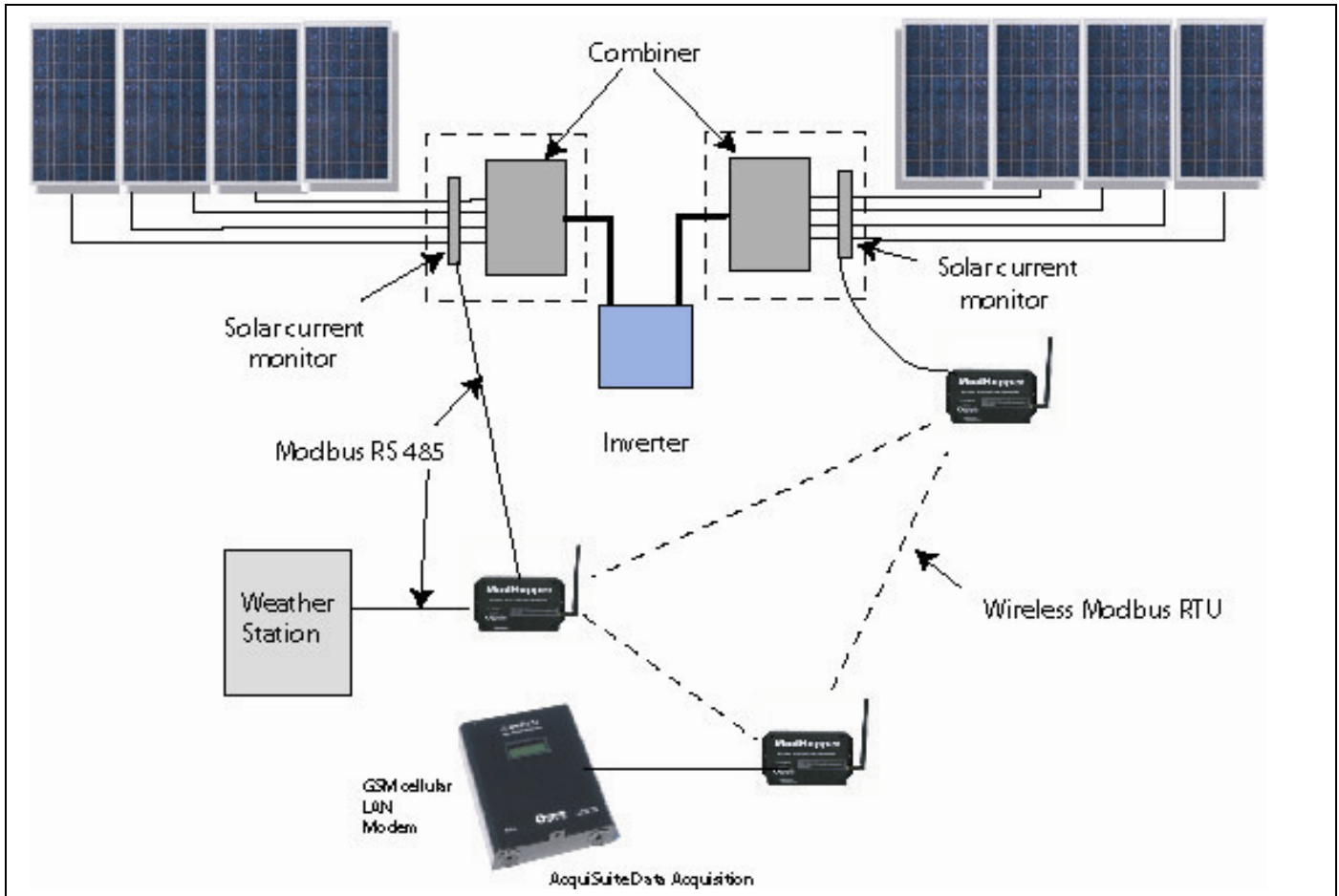
- Hall Effect sensors monitor currents accurately without dangerous connections
- Modbus output provides open protocol for flexibility in communications
- ModHopper transceivers eliminate costly wiring runs
- Setup and configuration is simple, saving time and money
- MCDM is designed to be installed in either new construction or existing installations

Monitor key performance parameters and detect problems quickly

- MCDM provides user-selectable options for detecting failed devices or panels
- Find and fix problems in a timely manner before penalties are incurred

Obvius lets you integrate all the essential information into an easy to use system:

- Wireless ModHopper™ transceivers from Obvius eliminate the need for costly wiring
- Up to 247 MCDM's can be networked for wireless communications with ModHoppers
- Obvius weather stations provide wireless Modbus data on critical conditions, including temperature, humidity, wind speed, wind direction and irradiance
- AcquiSuite™ data acquisition server from Obvius provides plug and play ease for lowest installed cost with options for phone, LAN or cellular communications
- Buildingmanageronline.com (BMO) web hosting service provides remote access to reports for multiple locations



Typical solar monitoring system

SPECIFICATIONS

- Sensor:** 8 channel hall effect sensor system:
- Power:** 24vdc required.
382mA.
- Communications:** RS485 (+,-,S) terminals, 9600, N, 8, 1, two wire.
- Protocol:** Modbus RTU
- Addressing:** Modbus address set via software/Modbus register. (1-247 allowed)
- Temp:** 0 to +60C. Operational. (0 to 140F)
- Humidity:** 0 to 95% non-condensing
- Accuracy:** +- 1% of full scale. (+- 0.5 A absolute)
- Sensor size:** 50 Amp, full scale.
- Isolation:** 1500v isolation between monitored conductor and the non-contact current sensor.
- Sensor opening:** 0.49 inch by 0.35 inch opening for load wire.