

Revenue-Grade Monitoring Kit for Solar Energy Systems



Key Features

A complete kit for your solar energy monitoring needs

- Access data, anywhere, anytime through a web browser
- Revenue-grade Energy meter
- Power and building demand monitoring, net metering
- Real-time power values at 15-minute Intervals
- Local data storage at 15-minute intervals
- Performance alarming
- Wireless connection optional
- 5-year monitoring and hosting service at MYPVDATA.com included
- Flexible network/field bus configuration with RS-485 Modbus communication
- Approved by CEC for CSI EPBB & PBI (PMRS & PDP)

Cost-effective Solutions

RECtrak™ 3 is the optimal kit if you need a cost-effective solution for monitoring and management of a PV system. With RECtrak 3 you get all the necessary components and functions to monitor energy production and demand at a fraction of the cost of a traditional supervision system. The RECtrak kit comes with one energy meter and one Internet Gateway and Data Logger. More meters can be purchased separately and connected via the Modbus Network. The Internet Gateway collects data and uploads it regularly, over the Internet, to the Energy Recommerce Information Server. Users log in to their account on MYPVDATA® to access information and manage their system from a Web browser. The server provides not only real-time and historical data, but also alarming, reports, rates analysis, logbooks, billing, and more.

Simplified System Design

The monitoring kit is developed with energy monitoring in mind and therefore the system design is very straightforward. Supporting application examples and CAD schematics help reduce engineering cost.

Secure Data and Validation

The Energy Recommerce Internet Gateway offers a very reliable solution. Encryption protects data interaction with the server. Time-stamps and CRC checksums secure data log files and prevent tampering. Energy meters are revenue grade and approved by the California Energy Commission as eligible for performance-based incentives.

Future Proof Solutions

Use of standard open solutions gives the RECtrak monitoring system the flexibility to grow with the user's evolving needs and facilitates integration with other systems.

Easy to Install and Manage

- Designed to facilitate quick installation.
- Remote configuration capabilities minimize truck rolls.
- Fully integrated and tested monitoring kit minimizes errors.
- Protocols support the http standard making it easy to install in secure IT networks.



Application

The REctrack™ 3 revenue-grade monitoring kit comes standard with one REctrack Internet Gateway and Data Logger and one revenue-grade energy meter. Also included is 5-year monitoring and hosting service on MYPVDATA.com. Additional meters or other devices can be connected on the Modbus Network. The gateway collects data and uploads it regularly, over the Internet, to the Energy Recommerce Information Server. Users log in to their account on MYPVDATA.com to access information and manage their system from a web browser.



REctrack 3 Specifications

Applications	240 VAC split phase, Performance monitoring, Demand Monitoring
Internet connection	Access to local LAN required via Ethernet. Cellular or dial-up modem as option
Power Supply Voltage	120 VAC (60Hz)
Enclosure	Steel, NEMA 4x
Size	16" x 20" x 6" (W x H x D)

Revenue-Grade Energy Meter

Measurement	Voltage, current: TrueRMS Power: 400 samples/cycle 24-bit ADC
Range	Auto-ranging up to 416Vac L-N (721Vac L-L)
Accuracy	IEC 687 (0.2% Accuracy) ANSI C12.20 (0.2% Acc.)
Field bus	Modbus RTU/ASCII

Current transformers must be ordered separately. See User's Guide for full specifications.

Monitoring Specifications

Monitoring	Power generation and demand. Energy generation and demand. 5-year monitoring (datalogging & alarming) and hosting service on MYPVDATA.com included.
Alarming	Performance and communication alarms to email and cell phone
Logging	Real-time power values at 15-minute intervals.
Local Storage	Logg data for 30 days
Management	Manage data and users remotely
Internet/LAN	Ethernet 10baseT– RJ45 TCP/IP, HTTP, FTP, XML
Field bus	Modbus/RS-485 Shielded TP

Compliance

Accuracy	IEC 687 (0.2% Accuracy) ANSI C12.20 (0.2% Acc.)
Safety	UL 508A, UL 1950/IEC 60950, CSA 22.2 No. 950-95
Emission	FCC Class B
Telecom	FCC Part 68

System is approved for CSI EPBB and PBI

Visit www.solarmagic.com and click Partner Portal for design support and more information.