

# Revenue-Grade Monitoring Kit for Residential Solar



## Key Features

- A complete kit for your residential 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™ 1 is an optimal, cost-effective solution for PV system monitoring and management. RECtrak 1 provides 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 and uploads data regularly, to the Energy Recommerce Information Server. Users log in to their account on MYPVDATA® to access information and manage their system online. The server provides real-time and historical data, as well as alarming and reports.

## Simplified System Design

The monitoring kit features a straightforward system design while supporting application examples and CAD schematics to help reduce engineering costs.

## Secure Data and Validation

The Energy Recommerce Internet Gateway offers a reliable solution that includes encryption to protect data interaction with the server; time-stamps and CRC checksums to secure data log files and prevent tampering; Revenue-Grade Energy Meters approved by the California Energy Commission for performance based incentives.

## 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 REctrak™ 1 revenue-grade monitoring kit comes standard with one REctrak Internet Gateway and Data Logger and one Revenue-Grade Energy Meter. Also included is 5 years 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 them 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.



**REctrak 1 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 Size	Steel, NEMA 4x 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 416 Vac 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 years 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	Log 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

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