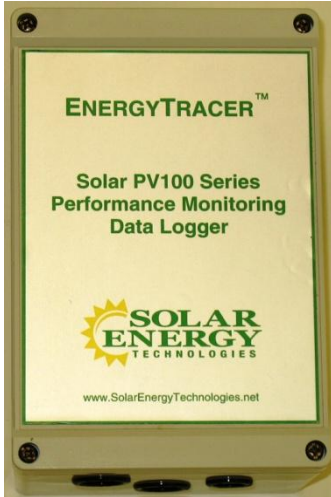


EnergyTracer™ PV100 Series for Monitoring Solar Electric Production



Solar Energy Technologies (SET) has designed the *EnergyTracer™ PV100* series solar power monitor and data logger to meet the needs of residential renewable energy applications. SET equipment monitors the health of solar electric power systems in real-time and with historical analyses of solar energy production. The data logger continuously collects energy production data from both the solar array and the inverter as well as calculates real-time power generation with accumulated energy output at specified sampling time intervals. The main energy screen shows key performance information about power output and energy production trends.

The *EnergyTracer™ PV100 series* solar electric data logger is designed for grid-tie use with one array and one inverter. This user-owned data collection system may be accessed by the owner-operator either on-site or remotely over the

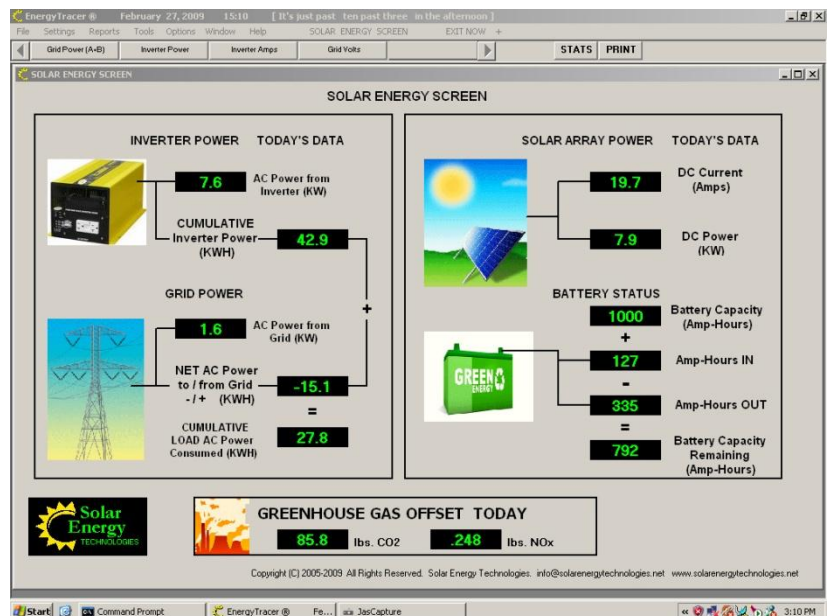
Internet*. Information gathered from sensors strategically placed on the solar PV system is collected 24/7 by the data logger and sent automatically to a personal computer on which energy data monitoring software is installed. All models are sensor expandable to use up to three AC current transformers, while models PV110 and PV130 are designed to measure only AC power and do not accept sensors to measure DC voltages and DC currents.

The eight-channel *EnergyTracer™* whose features and software are common to all *PV100 series* models (except for DC power measurements**) can be configured to accept the following measurement sensors:

- Solar array DC output power**
- Inverter AC output power
- Solar array DC voltage**
- AC grid power consumed in real-time or cumulatively
- Battery DC voltage, capacity status, and state of charge (SOC)**
- AC power returned to grid through net metering

*requires use of an IP addressable module

**only usable on Model PV120



Solar Energy Technologies

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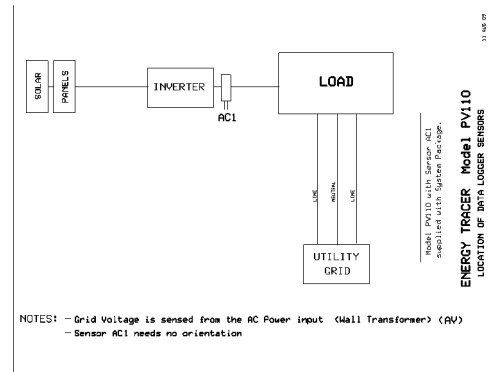
EnergyTracer™ Software Features

- Selectable parameters for charts and plots
- Selectable between bar and line graph plotting
- Printable plots and charts
- Selectable historical time periods for data plots
- Four settable parameter plotting menu bar buttons
- Selectable grid-tied installation setups for solar production display
- Solar production real-time energy screen display
- Real-time auto-refresh plot data and screen updates
- Selectable auto and window plot scaling
- View charts in KWH and Cost/KWH
- Field sensor calibration option
- 120/240 AC inverter voltage use
- Selectable DC array voltage operation**
- Up to eight selectable sensor measurements
- Resettable cumulative total readings
- Settable battery charge capacity**
- Selectable on-site data collection or network operation
- In depth how-to-use software tutorial
- Selectable start and stop daily data collection times
- View real-time/cumulative energy usage to/from grid
- Selectable measurement parameters: voltage, current and power
- Statistics tables for cumulative renewable energy generated and greenhouse gases averted
- Numerous selectable plotting periods; day-to-day, week-to-date, month-to-date, year-to-date and more

EnergyTracer™ Models

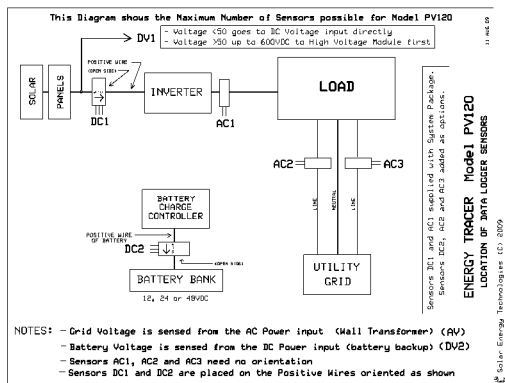
Model PV110

This entry-level EnergyTracer package, which is designed for single phase grid-tie inverter use, includes a data logger, easy-to-use professional data logging PC software, and a single 100-amp AC current transducer that measures inverter AC output power. This entry level data logger is sensor scalable to the PV130.



Typical Wiring Diagram for Model PV110

Typical Wiring Diagram for Model PV120

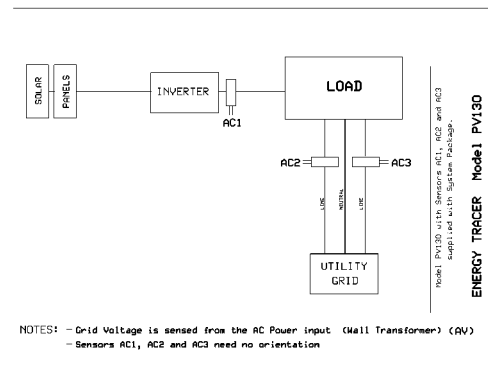


Model PV120

This package, which is designed for grid-tie with either battery use or DC power monitoring, includes a data logger, professional data logging PC software, a single 100-amp AC current transducer, and a single DC current sensor that measures either battery state of charge (SOC) or solar array DC output power. Additional DC and AC current sensors can be added for more data collection.

Model PV130

This package, which is designed for monitoring solar inverter AC power output, single-phase grid power use and net metering (power return to the grid) applications, includes a data logger, professional data logging PC software, and three 100-amp AC current transformers for building AC load and inverter monitoring.



Typical Wiring Diagram for Model PV130