

# 235 Watt - Pole mounted solar power unit *with sun Tracking*

With 235 WATT solar panel and grid tie inverter

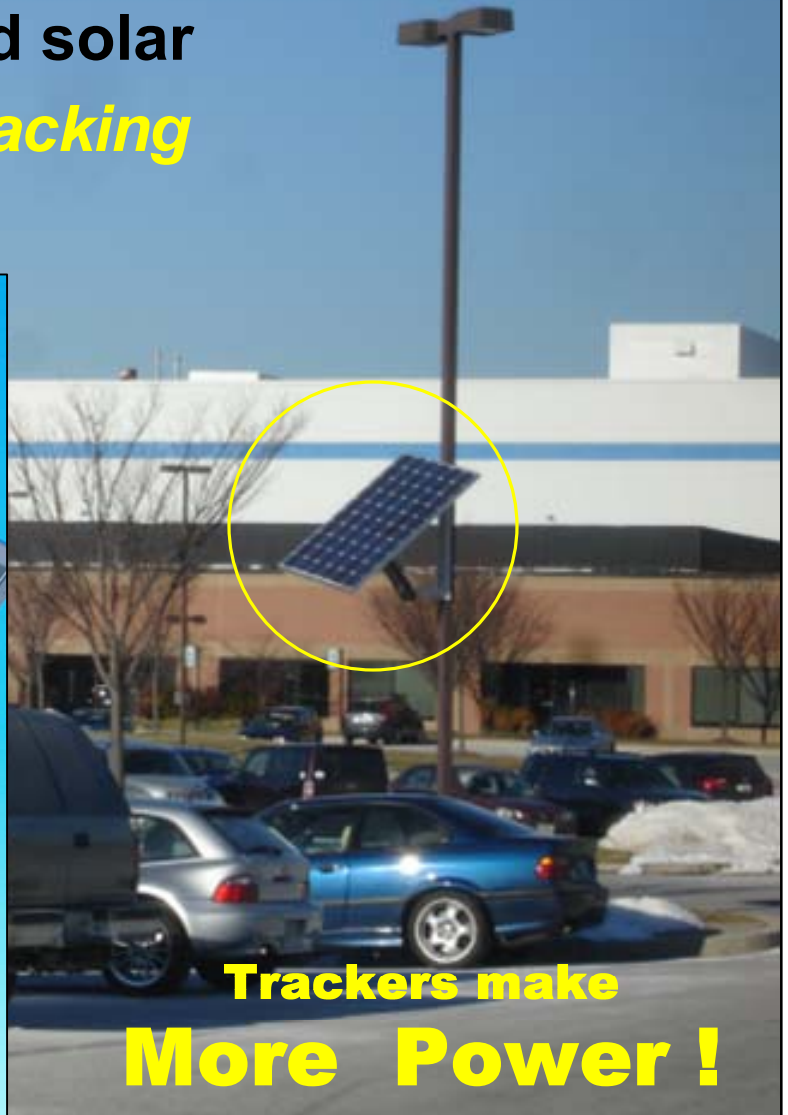
## SPT - Single Panel Tracker



**SPT-1010-235GT**

PATENT PENDING

The ATR SPT-1010 Pole-mounted Solar Tracker system incorporates advanced communications & control technology and multiple patent-pending features to deliver distributed PV solar power at breakthrough levels of efficiency and reliability. Intelligent motion control, extremely robust actuation and supercapacitor technology come together to boost the energy yield of PV panels by 30+ % over fixed-mount panels. Designed for easy, low-cost installation and able to withstand rigorous environmental conditions, this tracker system offers unparalleled ease in tapping the overlooked energy collection potential of lighting pole assets.



## Trackers make More Power !

### Impressive Features

- 30+ % energy gain from sun tracking
- Built-in grid-tied power inverter
- No batteries
- Automatic, precise calculation of sun position
- Never fooled by weather conditions
- Real-time status and production reporting over the web
- Extremely low maintenance requirements

### Distributed Power Generation Made Easy:

- Retrofitable to most existing lighting poles
- Utilize existing utility wiring when possible
- Modular plug-and-play connection
- No ground space requirement
- Avoid the maintenance problems of roof mount systems

### Perfect For:

- ✓ Business and commercial parking lots and walkways
- ✓ Municipal, State and Federal facility outdoor lighting
- ✓ Rural farm poles

Contributes to LEED points  
Operate as a grid-tied energy producer  
Eligible for American Recovery and Reinvestment Act (ARRA) energy projects

# SPT-1010-235GT

## Pole mounted power unit

With 235 WATT solar panel and grid tie inverter

# More Power!

existing poles and grid access

### Electrical Characteristics

#### MOTECH 235 watt module

Power	235W
Type of cell	polycrystalline silicon
Max Power Voltage	30.7 V
Max Power Current	7.7 A

#### Grid Tie inverter (EnPhase M215)

Voltage output to grid	208 or 240 VAC
Static MPPT efficiency	99.6%
Peak inverter efficiency	96.3%

### Standard Installation Options

#### Pole Mount Brackets

- Round pole - 4", 5", 6" diameter
- Square pole - 4", 5", 6" sides
- ½" Bolts for wooden poles

#### Inverter AC installation Kits

- Ground Kits
- Banner Kits
- Web based performance and Analysis (Envoy communications)

### Mechanical Characteristics

Dimensions (solar panel)	65"h x 39.1"w x 1.97"d
Dimensions (mount and frame total envelope)	48" h x 39"w x 48" d
Weight (installed with solar panel)	119 lb
Cooling	Natural Convection
Mounting	2 "U" bolts with cradles (½" bolts for wood poles)

### Tracking Control system

- Microprocessor-based true position sun tracking
- GPS enabled for automatic initialization
- High accuracy tracking
- Fail-safe return to due South
- No batteries to replace
- Efficient controller with low power consumption

### Operating Conditions

High strength steel mount designed for max gust	90 MPH
Temperature operating range	-40C to +65C
Snow loading	less than 36" on panel

### System Performance

- 30+ % improvement in energy collection
- +/- 60 degree collection sweep

### Warranted against defects in material and workmanship

Mount mechanism, controller, motor	- 5 yr limited warranty
Grid-tied inverter	- Manufacturers warranty
Solar Panel	- Manufacturers warranty

### System Reliability

- Steel construction with powder coat surface treatment
- High reliability sealed actuator
- Steel gear transmission and bronze bushings
- No scheduled maintenance required

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## Energy Systems

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