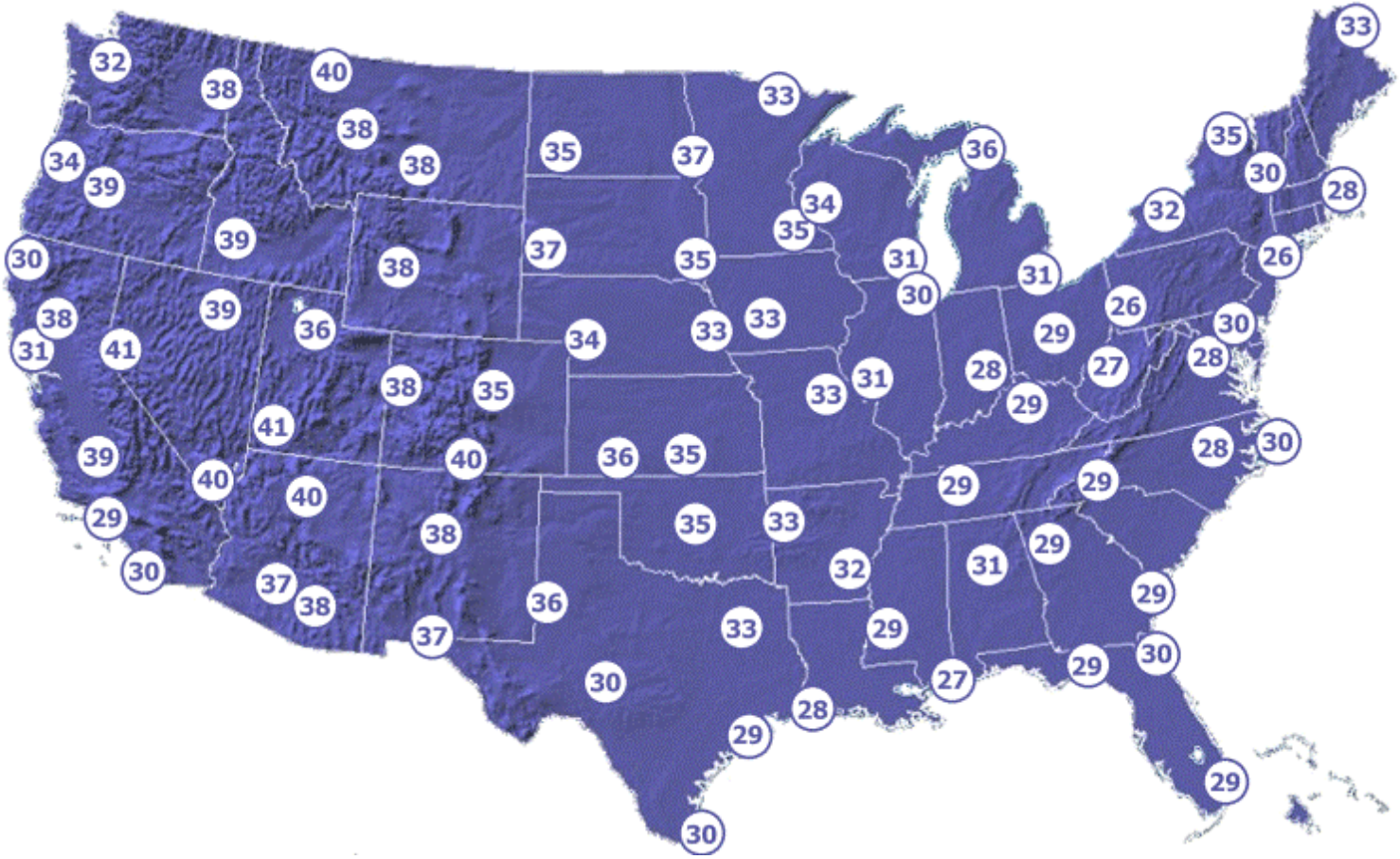
WATTSUN SOLAR TRACKERS: SUGGESTED RETAIL PRICE AND ORDERING GUIDE



Percent Annual Power Increase for a Wattsun Dual-Axis Solar Tracker
vs.
a Fixed, South-facing Rack with tilt equal to site latitude.
(Tracker and Fixed Rack hold the same amount of PV kW)

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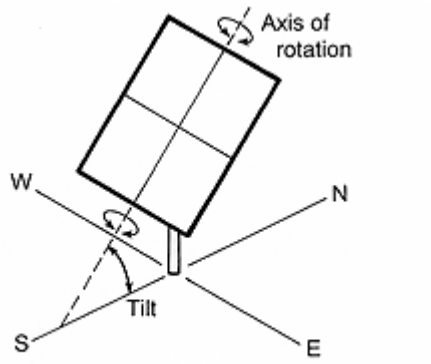
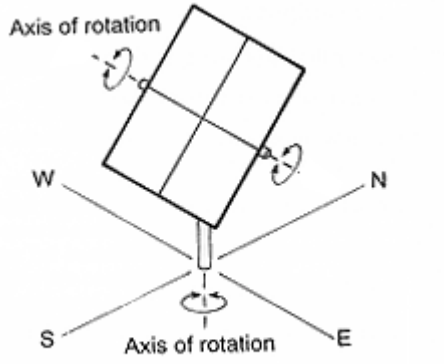


One-axis tracking flat-plate collector with axis oriented north-south

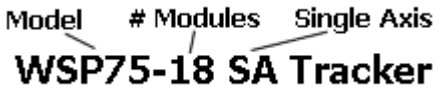


Two-axis tracking flat-plate collector

SECTION 1 HOW TO ORDER WATTSUN SOLAR TRACKERS

PART NUMBERS: SAMPLE OF LINE ITEMS FOR TRACKER ORDER

ITEM	DESCRIPTION
WSP75-18 SA	Single-Axis Tracker for 18 Siemens SP75 Modules
WD/A Option	Dual-Axis Option for Azimuth Tracker
W48-24 LVC	DC to DC Converter for 48 VDC Systems
W-Mancon	Manual Control Switches installed on Tracker Controller. Allows for manual override of automatic tracking.
WSSHW-18	Replace standard Zinc Plated Hardware to Stainless Steel Hardware for harsh climates



A tracker descriptions reflect the type of tracker drive and the maximum amount of PV array surface area that can be mounted on the drive. There are three types of tracker drives:

- **Wattsun TR-Series: Single-Axis Tilt and Roll Tracker -** A Linear Actuator drives the array East to West rotating about a North-South Axis. Array elevation is done manually. Automatic elevation (Dual-Axis) using a second motor is not available. There are two Single-Axis TR Trackers available. The TR-15 and the TR-75.

- **Gear Drive Horizon**

- **Azimuth Tracker: A motor driven Worm and Ring Gear Assembly rotates the tracker about the Zenith. Automatic Elevation (Dual-Axis) is available.**

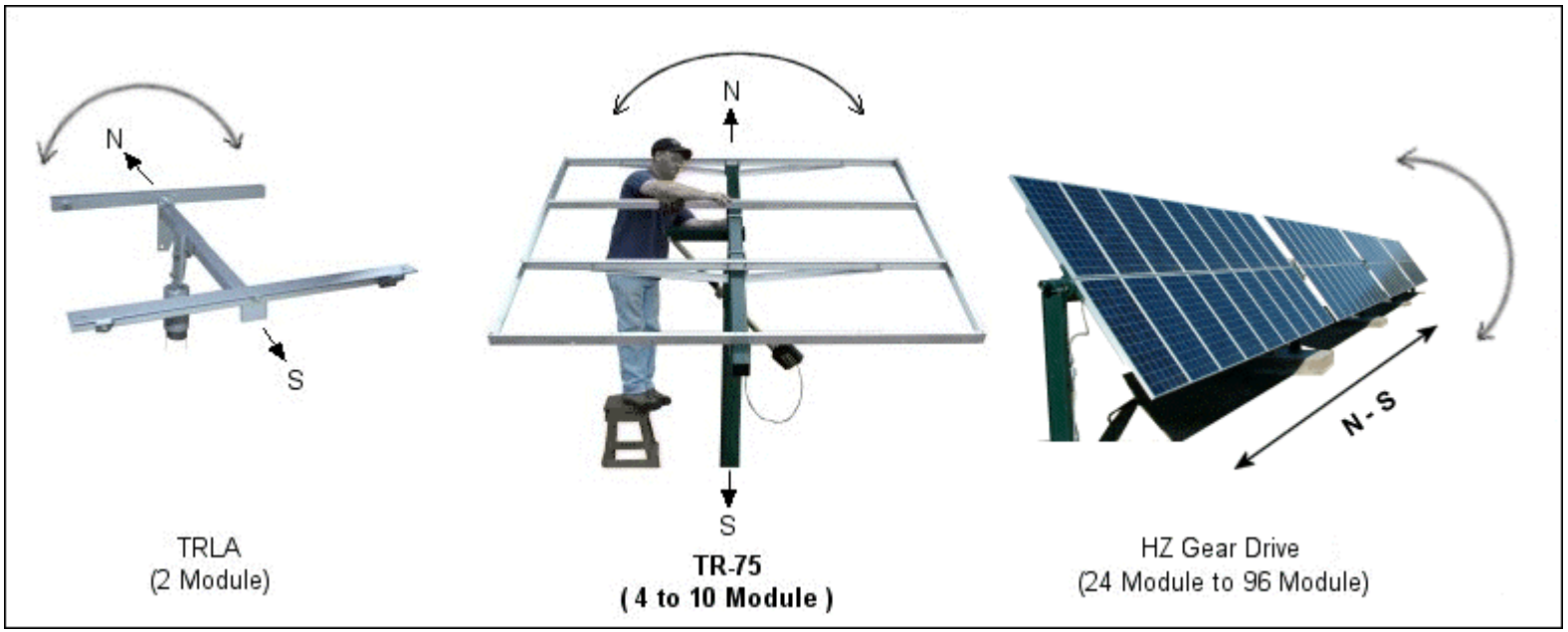
Wattsun Trackers include all the hardware to assemble the drive and frame. Additionally, stainless steel hardware is provided for mounting the modules. Common options include:

- Dual-Axis - Automatic array elevation for AZ-125 and AZ-225 trackers. Included in the price of AZ-225 trackers.
- Converters - For PV System voltages other than 24 VDC.
- Manual Control Option - A switch that disables automatic tracking and switches that allow the owner to motor the tracker into any position. Most useful for laying the tracker flat in high winds or for dumping any accumulated snow.

Stainless Steel Hardware - For harsh, salt-laden marine or coastal environments. We replace most of the zinc-plated drive and frame hardware with stainless steel hardware. Unnecessary for most inland applications.

SECTION 2 THREE MODELS OF SINGLE-AXIS TRACKERS

- Tilt and Roll Trackers track East to West and rotate about a fixed North-South axis. Two to Ten module trackers for water pumping or small PV applications. Capacity up to approximately 850 watts.
- Horizontal Axis, Gear Drive: Tracker for Large Stand Alone or Grid-Tie applications. Capacity up to 12 kW.

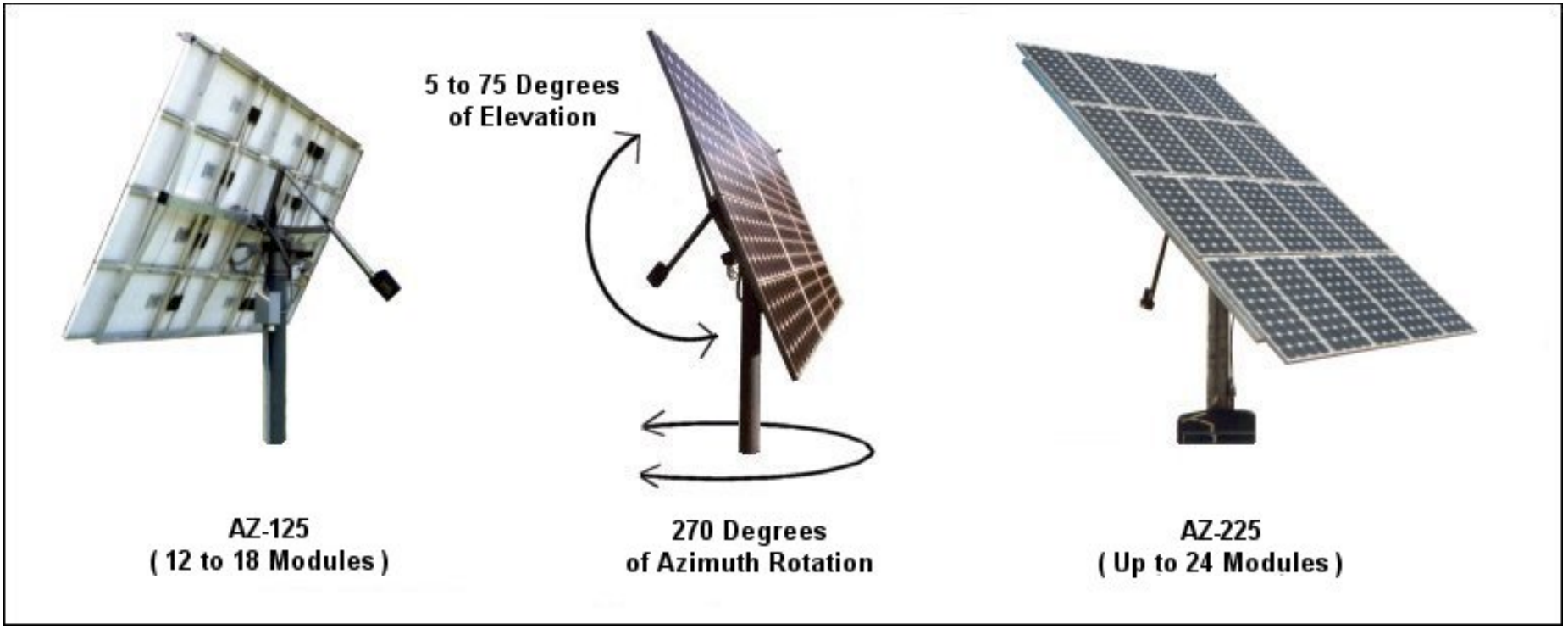


[Tracker capacity based on the dimensions and wattage of a typical BP585 (85W) or Shell/Siemens SP75 (75W) module.]

MODEL	DESCRIPTION : DRIVE TYPE	MOUNTING PIPE SIZE
TR-15	Tilt & Roll: Linear Actuator Drive (Approximately 15 Sq. Ft. Array Area)	Mounts on one 2" ID (2-1/2" OD) SCH40 Steel Pipe Mast
TR-75	Tilt & Roll: Linear Actuator Drive (Approximately 75 Sq. Ft. Array Area)	Mounts on one 4" ID (4-1/2" OD) SCH40 Steel Pipe Mast
HZ GEAR	Horizontal Axis: Gear Drive: (Approximately 1000 Sq. Ft. Array Area)	Mounts on multiple 6" ID (6-5/8" OD) SCH40 Steel Pipe Masts

SECTION 3 TWO MODELS OF AZIMUTH TRACKERS

- Azimuth Trackers track East to West and rotate about the Zenith.
- The Dual-Axis Option allows for automatic tracking of the sun's elevation.
- Ten to Twenty-Four module trackers for Grid-Tie or Remote PV applications.



[Tracker capacity based on the dimensions and wattage of a typical BP585 (85W) or Siemens SP75 (75W) module.]

MODEL	DESCRIPTION : DRIVE TYPE	MOUNTING PIPE SIZE
AZ-125	Small Azimuth Tracker: Gear Drive (Approximately 125 Sq. Ft. Array Area)	Mounts on 6" ID (6-5/8" OD) SCH40 Steel Pipe Mast
AZ-225	Large Azimuth Tracker: Gear Drive (Approximately 225 Sq. Ft. Array Area)	Mounts on 8" ID (8-5/8" OD) SCH40 Steel Pipe Mast

SECTION 4 WATTSUN TRACKER DRIVES, ELEVATION, RACKED WATTS, & PV SYSTEM COMPATIBILITY.

DRIVE	SINGLE AXIS DRIVE MOTOR DESCRIPTION	MANUAL ELEVATON	DUAL-AXIS AVAILABLE	APPROXIMATE MAXIMUM RACKED WATTS
TR-15	Tilt & Roll: Linear Actuator Drive	5° to 55°	No	170
TR-75	Tilt & Roll: Linear Actuator Drive	5° to 70°	No	850
HZ-Gear	Horizontal Axis: Gear Drive	No	No	12000
AZ-125	Small Azimuth Tracker: Gear Drive	5° to 75°	Yes - Optional	1530
AZ-225	Large Azimuth Tracker: Gear Drive	5° to 75°	Yes - Included	2040

[Tracker capacity based on the dimensions and wattage of a typical BP585 (85W) or Siemens SP75 (75W) module.]

WATTSUN TRACKER CONTROLLER POWER SUPPLY

We recommend that the AZ and HZ Series tracker controllers be tied to a battery bank or grid-based power supply for best performance.

The Wattsun Solar Tracker Controller operates at a nominal 24VDC. It can tap power directly from a PV array or a battery bank. In general, for system voltages other 24 VDC a small converter or power supply is necessary to provide the proper voltage to the tracker controller. Note that the small, 2-module, TR-15 can operate at 12 or 24VDC. The converters and power supplies can be purchased as an option when ordering your tracker. Please consult the table below for our recommendations. Not recommended means that the tracker is likely to be inappropriate for the application.

DRIVE MODEL	12 VDC SYSTEM	24 VDC SYSTEM	48 VDC	115 VAC or 230 VAC GRID-TIE or 90 VDC to 370 VDC applications (No Battery Bank)
TR-15	Battery Bank Only	Array Direct or Battery Bank	DC-DC Converter	Not Recommended
TR-75	DC-DC Converter	Array Direct or Battery Bank	DC-DC Converter	Not Recommended
HZ-Gear	Not Recommended	Array Direct or Battery Bank	DC-DC Converter	High Efficiency AC-DC Power Supply
AZ-125	Not Recommended	Array Direct or Battery Bank	DC-DC Converter	High Efficiency AC-DC Power Supply
AZ-225	Not Recommended	Array Direct or Battery Bank	DC-DC Converter	High Efficiency AC-DC Power Supply

SECTION 5 WATTSUN TRACKER MOUNTING PIPE SIZE

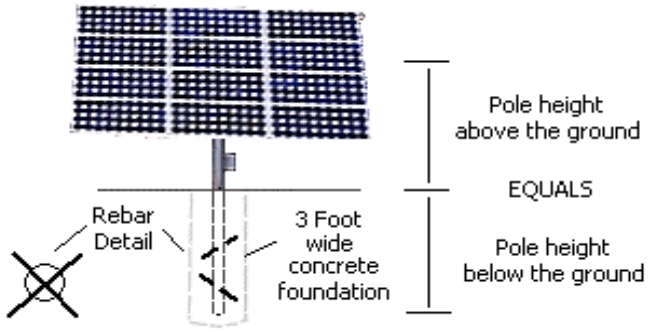
The Schedule 40, Steel Mounting Pipe is not included with your tracker purchase. However, we can supply the pipe if desired.
See the individual Wattsun Technical Data Sheets for tracker dimensions and the recommended maximum mounting pipe height.

DRIVE	DESCRIPTION	PIPE SIZE
TR-15	Tilt & Roll: Linear Actuator Drive	Mounts on 2" ID (2-1/2" OD) SCH40 Steel Pipe Mast
TR-75	Tilt & Roll: Linear Actuator Drive	Mounts on 4" ID (4-1/2" OD) SCH40 Steel Pipe Mast
HZ-Gear	Horizontal Axis: Gear Drive	Mounts on 6" ID (6-5/8" OD) SCH40 Steel Pipe Masts
AZ-125	Small Azimuth Tracker: Gear Drive	Mounts on 6" ID (6-5/8" OD) SCH40 Steel Pipe Mast
AZ-225	Medium Azimuth Tracker: Gear Drive	Mounts on 8" ID (8-5/8" OD) SCH40 Steel Pipe Mast

WARNING! WINDY CONDITIONS CAN EXERT EXTREME FORCES ON THE ARRAY, FOUNDATION, AND PIPE MAST OF YOUR TRACKER.

TYPICAL TRACKER FOUNDATION DIAGRAM
(Using recommended mast height from your Technical Data Sheet)

Array Technologies, Inc. assumes no liability for your foundation installation.



Please consult with a local professional or your Wattsun Solar Tracker Dealer to design your foundation.

SECTION 6 WATTSUN TRACKER OPTIONS

Dual-Axis Option for AZ-125 Drive: $395

- **Part # WD/A Option**
- **Dual-Axis is included with the AZ-225 drive**

Dual-Axis is optional for the AZ-125 Series Trackers and included with the AZ-225's. The Dual-Axis Option allows for automatic elevation of the array so that the owner does not have to manually adjust the array monthly or seasonally. The Dual-Axis Option includes an Elevation Actuator and a Dual-Axis Controller.

Stainless Steel Hardware Option

- **Part # WSSHW-xx** (Replace xx with number of modules)

Number of Modules	2	4	6	8	10	12	14	16	18	20	24
Price	$25	$40	$50	$60	$70	$80	$85	$90	$100	$110	$120

All Wattsun Trackers include stainless steel module mounting bolts and all the hardware necessary for installation. The SS Hardware Option replaces most of the standard zinc plated drive/frame hardware and is typically used in coastal, salt-laden or corrosive environments.

Manual Control Option: $125 Factory Installed on a new tracker or $150 Field Kit Retrofit for controllers manufactured since Jan 2000.

- **Part # W-Mancon**
- **Part # W-Mancon Kit**

Manual controls are switches mounted on the exterior of the control chassis. The controller is located on the Azimuth gear drive assembly. Manual controls allow the user to disable automatic tracking and manually track the array into any desired position. They are especially useful in areas that experience tropical storms or extremely high winds. With a Dual-Axis Tracker, the user can track the array into a "stow" or horizontal position and reduce the wind loading on the tracker.

Voltage Converters and Switching Power Supplies: $58 to $165

If you are ordering an AZ Series Tracker with an array voltage other than 24VDC you will need a voltage converter. Please review the Wattsun Tracker Installation Guides for system configuration details. Please consult with Array Technologies or your dealer for if you have any concerns about your PV system voltage application.

- **Part # W12-24 15W** (For 12V TR-75 Systems) **$125**
- **Part # W48-24 LVC** (For 48V AZ-125 Azimuth Tracker Systems) **$58**
- **Part # W48-24 HD** (For 48V AZ-225 Azimuth Tracker Systems) **$130**
- **Part # WSP-150-24** (For "Battery-less" Grid-Tie Systems and High Voltage Water Pumping Systems) **$165**

WATTSUN
SOLAR TRACKERS

SECTION 7 — SUGGESTED RETAIL PRICE

(* Dual-Axis Option Included with AZ-225 Drive)

		Number of Modules per Tracker											
Manufacturer	**Model**	**2**	**4**	**6**	**8**	**10**	**12**	**14**	**16**	**18**	**20**	**24**	**28**
ASE	ASE 100	$1,195	$1,245	N/A	N/A	N/A	$2,095	N/A	N/A	N/A	$3,750*	N/A	N/A
ASE	ASE 300	$1,245	$1,995	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AstroPower	AP 65/75	$495	$1,195	$1,245	$1,295	$1,325	$1,795	N/A	N/A	$2,195	N/A	$3,750*	$3,950*
AstroPower	AP 110/120	$1,195	$1,245	$1,295	$1,895	$1,995	$2,295	N/A	N/A	$3,950*	N/A	N/A	N/A
BP	BP 2150/4160	$1,195	$1,245	$1,795	$2,195	$2,395	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
BP	BP 275/590	$495	$1,195	$1,245	$1,295	$1,325	$1,795	N/A	N/A	$2,195	N/A	$3,750*	$3,950*
BP-Solarex	MSX 110/120	$1,195	$1,245	$1,295	$2,195	N/A	$3,750*	N/A	N/A	$3,950*	N/A	N/A	N/A
BP-Solarex	SX 850 (GF43)	N/A	$1,195	$1,245	$1,795	$1,995	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BP-Solarex	SX 75/85	$495	$1,245	$1,295	$1,345	$1,795	$1,995	N/A	$2,295	N/A	N/A	$3,950*	N/A
BP-Solarex	SX 120	$1,195	$1,245	$1,295	$2,195	$2,295	$3,750*	N/A	$3,950*	N/A	N/A	N/A	N/A
BP-Solarex	SX 150	$1,195	$1,245	$1,795	$2,195	$2,395	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Evergreen	EC-64	$1,195	$1,245	$1,295	$1,345	$1,795	$1,995	N/A	N/A	$3,750*	N/A	$3,950*	N/A
Evergreen	EC-102	$1,195	$1,295	$1,345	$2,195	$2,295	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Kyocera	KC60	$495	$1,195	$1,245	$1,295	N/A	$1,795	N/A	$1,995	N/A	$2,195	N/A	N/A
Kyocera	KC80	$495	$1,195	$1,295	$1,345	$1395	$1,795	N/A	$2,195	N/A	N/A	$3,750*	N/A
Kyocera	KC120	$1,195	$1,245	$1,295	$1,895	$1,995	$2,295	N/A	N/A	$3,950*	N/A	N/A	N/A
Kyocera	KC158	N/A	$1,295	$1,795	$1,995	N/A	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Matrix	PW 75/85	$495	$1,195	$1,245	$1,295	$1,795	$1,895	N/A	N/A	$2,295	N/A	$3,950*	N/A
Matrix	PW 95/100	$1,195	$1,295	$1,345	$1,795	$1,995	$2,295	N/A	N/A	$3,950*	N/A	N/A	N/A
Matrix	PW 125/135	$1,195	$1,245	$1,295	$1,895	N/A	$2,295	N/A	N/A	N/A	N/A	N/A	N/A
Matrix	PW 165/175	N/A	$1,345	$1,795	N/A	N/A	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Sharp	NE-80E1U (80W)	$495	$1,195	$1,245	$1,295	$1,325	$1,795	N/A	N/A	$2,195	N/A	$3,750*	N/A
Sharp	ND-L3E1U (123W)	$1,195	$1,245	$1,295	$1,895	$1,995	$2,295	N/A	N/A	$3,950*	N/A	N/A	N/A
Sharp	NE-L125U2 (125W)	$1,195	$1,245	$1,295	$1,795	$2,295	N/A	N/A	$3,750*	N/A	N/A	N/A	N/A
Sharp	ND-QOE2U (160W)	$1,245	$1,295	$1,795	N/A	N/A	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Sharp	NE-Q5E2U (165W)	$1,245	$1,295	$1,795	$2,195	N/A	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Schott	SAPC155/165	$1,245	$1,295	$1,795	$2,195	N/A	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Siemens	SM100/110	$495	$1,265	$1,325	$1,345	$1,995	$2,295	N/A	N/A	$3,950*	3,950*	N/A	N/A
Siemens	SP 65/75	$495	$1,195	$1,245	$1,295	$1,325	$1,795	N/A	N/A	$2,195	N/A	$3,750*	$3,950*
Siemens	SP 130/150	$1,195	$1,245	$1,795	$2,195	N/A	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
Siemens	SR 90/100	$1,195	$1,245	$1,295	$1,895	$1,995	$2,195	N/A	N/A	$3,950*	N/A	N/A	N/A
SunWize	SW90	$1,195	$1,245	$1,295	$1,325	$1,895	$3,750*	N/A	N/A	N/A	N/A	N/A	N/A
SunWize	SW115	$1,195	$1,245	$1,295	$1,795	$1,995	$2,295	N/A	N/A	$3,950*	N/A	N/A	N/A
United Solar	US64	$1,195	$1,245	$1,295	$1,795	$1,995	N/A	N/A	N/A	N/A	N/A	N/A	N/A

WATTSUN
SOLAR TRACKERS

SECTION 8 DRIVE REFERENCE

(* Dual-Axis Option Included with AZ-225 Drive)

		Number of Modules per Tracker											
Manufacturer	**Model**	**2**	**4**	**6**	**8**	**10**	**12**	**14**	**16**	**18**	**20**	**24**	**28**
ASE	ASE 100	TR-75	TR-75	N/A	N/A	N/A	AZ-125	N/A	N/A	N/A	AZ-225	N/A	N/A
ASE	ASE 300	TR-75	AZ-125	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AstroPower	AP 65/75	TR-15	TR-75	TR-75	TR-75	TR-75	AZ-125	N/A	N/A	AZ-125	N/A	AZ-225	AZ-225
AstroPower	AP 110/120	TR-75	TR-75	TR-75	AZ-125	AZ-125	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A
BP	BP 2150/4160	TR-75	TR-75	AZ-125	AZ-125	AZ-125	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
BP	BP 275/590	TR-15	TR-75	TR-75	TR-75	TR-75	AZ-125	N/A	N/A	AZ-125	N/A	AZ-225	AZ-225
BP-Solarex	MSX 110/120	TR-75	TR-75	TR-75	AZ-125	N/A	AZ-225	N/A	N/A	AZ-225	N/A	N/A	N/A
BP-Solarex	SX 850 (GF43)	N/A	TR-75	TR-75	AZ-125	AZ-125	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BP-Solarex	SX 75/85	TR-15	TR-75	TR-75	TR-75	AZ-125	AZ-125	N/A	AZ-125	AZ-225	N/A	N/A	N/A
BP-Solarex	SX 120	TR-75	TR-75	TR-75	AZ-125	AZ-125	AZ-225	N/A	AZ-225	N/A	N/A	N/A	N/A
BP-Solarex	SX 150	TR-75	TR-75	AZ-125	AZ-125	AZ-125	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Evergreen	EC-64	TR-75	TR-75	TR-75	TR-75	AZ-125	AZ-125	N/A	N/A	AZ-225	N/A	AZ-225	N/A
Evergreen	EC-102	TR-75	TR-75	TR-75	AZ-125	AZ-125	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Kyocera	KC60	TR-15	TR-75	TR-75	TR-75	TR-75	AZ-125	N/A	AZ-125	N/A	AZ-125	N/A	N/A
Kyocera	KC80	TR-15	TR-75	TR-75	TR-75	N/A	AZ-125	N/A	AZ-125	N/A	N/A	AZ-225	N/A
Kyocera	KC120	TR-75	TR-75	TR-75	AZ-125	AZ-125	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A
Kyocera	KC158	N/A	TR-75	AZ-125	AZ-125	N/A	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Matrix	PW 75/85	TR-15	TR-75	TR-75	TR-75	AZ-125	AZ-125	N/A	N/A	AZ-125	N/A	AZ-225	N/A
Matrix	PW 95/100	TR-75	TR-75	TR-75	AZ-125	AZ-125	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A
Matrix	PW 125/135	TR-75	TR-75	TR-75	AZ-125	N/A	AZ-125	N/A	N/A	N/A	N/A	N/A	N/A
Matrix	PW 165/175	N/A	TR-75	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Sharp	NE-80E1U (80w)	TR-15	TR-75	TR-75	TR-75	TR-75	AZ-125	N/A	N/A	AZ-125	N/A	AZ-225	N/A
Sharp	ND-L3E1U (123W)	TR-75	TR-75	TR-75	AZ-125	AZ-125	N/A	N/A	N/A	AZ-225	N/A	N/A	N/A
Sharp	NE-L125U2 (125W)	TR-75	TR-75	TR-75	AZ-125	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A	N/A
Sharp	ND-QOE2U (160W)	TR-75	TR-75	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Sharp	NE-Q5E2U (165W)	TR-75	TR-75	AZ-125	AZ-125	N/A	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Schott	SAPC155/165	TR-75	TR-75	AZ-125	AZ-125	N/A	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Siemens	SM100/110	TR-15	TR-75	TR-75	TR-75	AZ-125	AZ-125	N/A	N/A	AZ-225	AZ-225	N/A	N/A
Siemens	SP 65/75	TR-15	TR-75	TR-75	TR-75	TR-75	AZ-125	N/A	N/A	AZ-125	N/A	AZ-225	AZ-225
Siemens	SP 130/150	TR-75	TR-75	AZ-125	AZ-125	N/A	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
Siemens	SR 90/100	TR-75	TR-75	TR-75	AZ-125	AZ-125	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A
SunWize	SW90	TR-75	TR-75	TR-75	TR-75	AZ-125	AZ-225	N/A	N/A	N/A	N/A	N/A	N/A
SunWize	SW115	TR-75	TR-75	TR-75	AZ-125	AZ-125	AZ-125	N/A	N/A	AZ-225	N/A	N/A	N/A
United Solar	US64	TR-75	TR-75	TR-75	AZ-125	AZ-125	N/A	N/A	N/A	N/A	N/A	N/A	N/A