



Spectrafy
solar spectral sensors

ST-5 Sun Tracker

By employing the latest advances in tracker technology, the ST-5 Sun Tracker achieves a breakthrough in the cost of accurate, reliable solar tracking.

The ST-5's compact size and weight make transport, installation and maintenance refreshingly simple and affordable. With a payload limit of 7 kg, the ST-5 can be configured to hold up to 4 direct or global SolarSIMs, or an equivalent mass of non-Spectrafy instruments.

The ST-5's automated control box employs a highly accurate and efficient solar positioning algorithm to determine the sun's location, while the precision engineered hardware ensures pointing accuracy of $\pm 0.1^\circ$. For custom uses, optional PC-based software allows manual control.

The on-board GPS automatically configures time and location upon start-up and eliminates internal clock drift, while the ST-5's integrated leveling feet, azimuth adjustment and tie-down bolts enable swift and easy installation via the integrated bubble level.

- **Easy-to-deploy**

The ST-5's compact size, clever engineering and automated control make installation swift and easy. Plug and play.

- **Small but powerful**

The ST-5's can host up to four direct or global SolarSIM sensors. More than enough for most applications.

- **Third-party compatibility**

The ST-5 can host irradiance sensors from all the major sensor manufacturers. A wide range of mounting fixtures are available.





ST-5: Specifications

Performance

Pointing accuracy	± 0.1°
Payload	7 kg
Elevation range	0° to 125°
Azimuth range	0° to 360°
Over rotation protection	Physical limit stops
Tracking mode	SPA based (open loop)
Heating	Optional
Control	Automated control box or RS-485 ASCII direct to PC

General

Weight	6 kg
Dimensions (W x D x H)	233 x 140 x 235 mm (L x W x H)
Power supply and use	12 VDC, 34W in motion, 4W when idle, ~70 Whr/day
Operating temperature range	-25°C to +55 °C (-40°C to +65 °C optional)
Humidity range	0 to 100% RH
Environmental protection	IP66
Cable length	10 m

Options

- SolarSIM-D2 mounting plate (1 – 4 units)
- SolarSIM-G mounting plate (1-4 units)
- Shading ball assembly (for diffuse measurement)
- Third party pyrheliometer mounting plates
- Third-party pyranometer mounting plates

