



Spectrafy
solar spectral sensors

ST-5 Solar Tracker

By employing the latest advances in tracker technology, the ST-5 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 5 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 | 5 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

