



STR-21G Sun Trackers

Technical Specifications

Single arm Sun Tracker

GPS for easy and accurate set up

Standard Integrated Sun sensor

Power consumption less than 10W

RS-232 serial interface for position control

The compact single arm sun tracker is perfectly suited to support all kinds of Global, Diffuse and Direct Radiation measurement sensors. STR-21G is the base of the Solar Monitoring Systems (STR-21G-S), a turnkey measurement solution from EKO. The STR-21G provides a fully automated set up procedure through a GPS receiver providing increased reliability and enhanced functionality.

From sunrise to sunset the compact sun-tracker guarantees accurate sun tracking and pointing of the attached solar sensors. The 2-axis tracker automatically adjusts to the sun's position by the sun sensor closed-loop control system, even if the tracker is not oriented or leveled properly.

The sun-tracker comes standard with a small table tripod (larger tripod available). The 24 VDC low power consumption tracker can be powered by a solar-powered battery system or DC power supply. A wide range AC power adapter can be supplied to

connect to the grid.

For over 20 years our clients who have deployed the STR sun-tracker, experience ease of set-up, operating and reliable tracking.

| | STR-21G |
|--|-----------------------------------|
| Arms | 1 |
| Pointing accuracy Solar elevation: 0 to 87° | < 0.01 ° |
| Angle resolution | 0.009 ° |
| Rotation angle Zenith | -15 - 95 ° |
| Rotation angle Azimuth | 0 - 360 ° |
| Torque | 12 Nm |
| Payload side arms | 7.5 kg (Total payload 15kg) |
| Sun sensor FOV | 30 ° |
| Ingress protection IP | 65 |
| Operating temperature range | -40 - 60 °C |
| Communication | RS-422 / 232C |
| Power consumption | < 10 W |
| Power supply | 21 to 31 VDC / 15W |
| Power supply (Power Adapter) | 100 to 240 VAC / 20W |
| Dimensions mm | 430 (W) x 380 (L) x 440 (H) |
| Weight | 14.5 kg (With tripod) |
| Motor | Stepper motor |
| Driving technology | Harmonic drive® |
| Tracking mode | Solar position / Free positioning |
| Tripod | Table tripod |
| Pyrheliometer mount | Adjustable / One position |
| Cable length | 10 m |

| Options | STR-21G |
|---|----------------------|
| Cable length Power cable | 20 / 30 m |
| Cable length Communication cable | 5 / 10 m |
| Shading assembly Disk | MD-81-10 (MS-80) |
| Top mounting plate A (1 position) | TMP-S-(sensor model) |
| Top mounting plate B (2 positions) | TMP-D-(sensor model) |

Specifications are subject to change without further notice.