



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.