



## Kipp & Zonen SOLYS Gear Drive Sun Tracker

Product #:

0381900

USD Price:

Contact Hach

The Kipp & Zonen SOLYS Gear Drive is a high-end sun tracker for all weather conditions and locations. It builds on the features of the SOLYS2 and has enhanced capabilities that make it suitable for use with heavy loads up to 80 kg and in the harshest climates, such as polar conditions.

SOLYS Gear Drive has the power to point accurately at the sun in very high winds, and to break the ice that can build up overnight when the tracker is 'sleeping'. Due to the very high torque and large range of available mounting plates and adapters, multiple loads can be mounted and used in extreme climates.

Applications: Designed for use in extreme climates; very hot, very cold, and high wind speeds. Can carry a large number of instruments and heavy loads. Ideal for many scientific research purposes.

### High payload for multiple and / or heavy instruments

The high precision gear drive system requires no regular maintenance and is much more powerful than the belt drive system of the SOLYS2. The maximum payload is increased to 80 kg and the torque is raised to 60 Nm, allowing SOLYS Gear Drive to carry multiple and/or heavy instruments and other loads. The integrated GPS receiver automatically configures location and very accurate time information upon installation.

### Smart software for real-time status information

The included user interface software allows remote monitoring and logging of the tracker status, sun zenith and azimuth angles, GPS time and date and more. The software can also be used to set the communication parameters such as fixed or manual IP address and baud rate. The integrated Web Interface can be used to visualize (get and set) operational parameters, download history log files or upload new firmware when available.

### No regular maintenance required

For operation in extremely cold regions an insulated cold weather cover is available that allows use in temperatures down to -50 °C and with wind speeds up to 20 m/s. For very hot climates a sun shield can be fitted, extending the upper temperature range to +60 °C. SOLYS Gear Drive has been tested and protected against the highest levels of ESD, EMC and surge disturbances that might be experienced.

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## Specifications

Analog Outputs:	No
Antenna:	Yes, GPS
Body material:	White coated aluminium
Communication:	Ethernet + web browser / RS-485

Compliance Certifications:	CE, FCC
Dimensions:	19.7 x 13.4 x 15 in (500 x 340 x 380 mm)
Display:	No
GPS Features:	Location, date, time, longitude, latitude
Integrated Logger:	No
Interface:	Ethernet, RS485
Internet Application Software:	SolysMonitor
IP Rating:	IP65
Level Accuracy:	# 0.1 degree
Operating Temperature Range:	-58 - +140 °F
Payload:	176 lbs (80 kg)
Pointing Wind Force:	Sair-Simpson Scale Hurricane Category 3
Power input:	24 VDC (18 to 30 VDC) and 90 to 264 VAC + 150 W for heater (AC)
Temperature Range:	-4 - +131 °F (DC power)  -58 - +131 °F (AC power) -58 °F up to 20 m/s wind speed with cold cover; to max. 140 °F with sun shield
Tracking Accuracy:	# ±0.1° (passive) # ±0.02° (active)
Transmission System:	High precision reduction gear
Weight:	50 lb (23 kg)