

SOLYS Gear Drive Pre-Launch



Kipp & Zonen webinar - March 2015
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Content

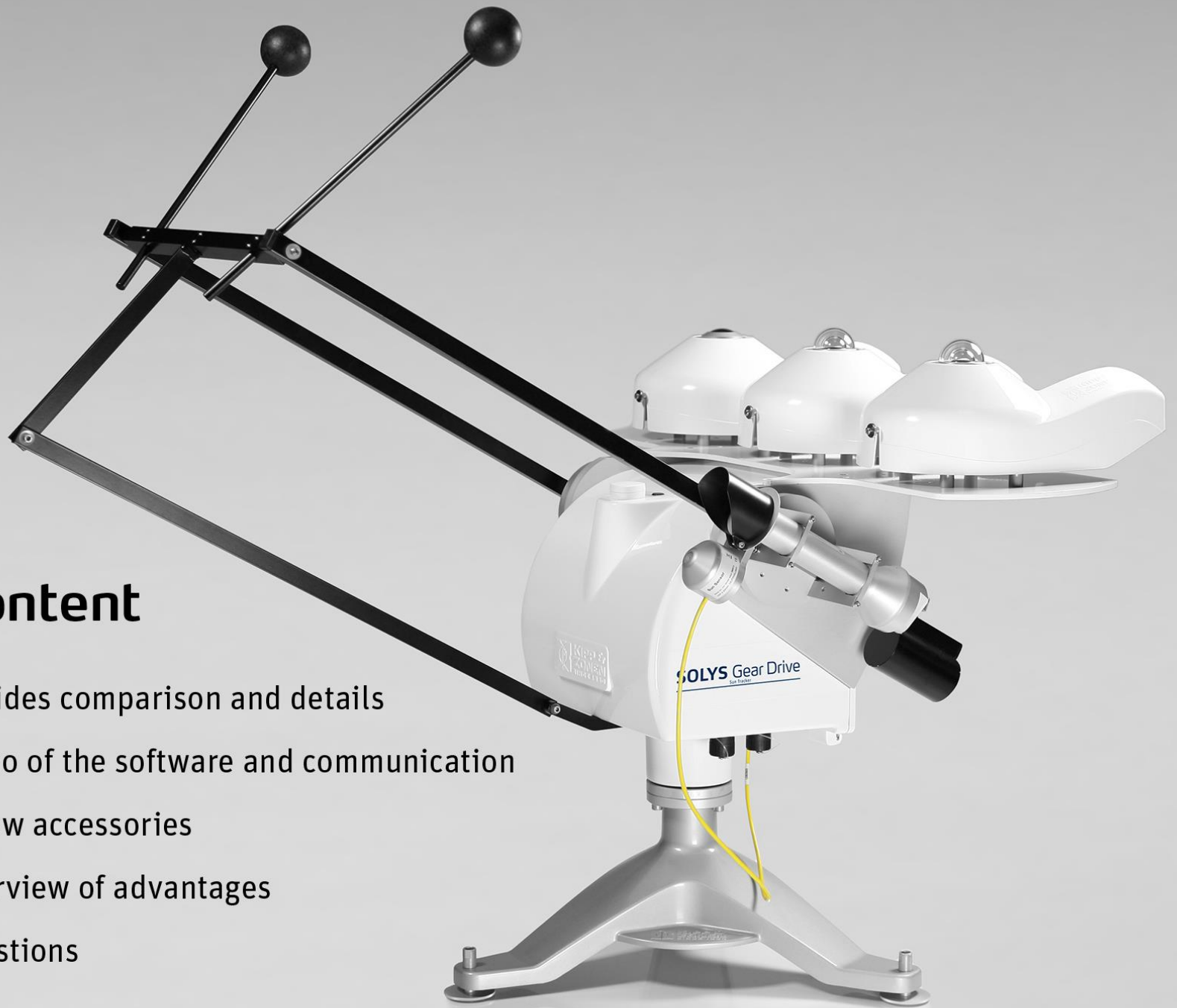
4 Slides comparison and details

Demo of the software and communication

2 New accessories

Overview of advantages

Questions

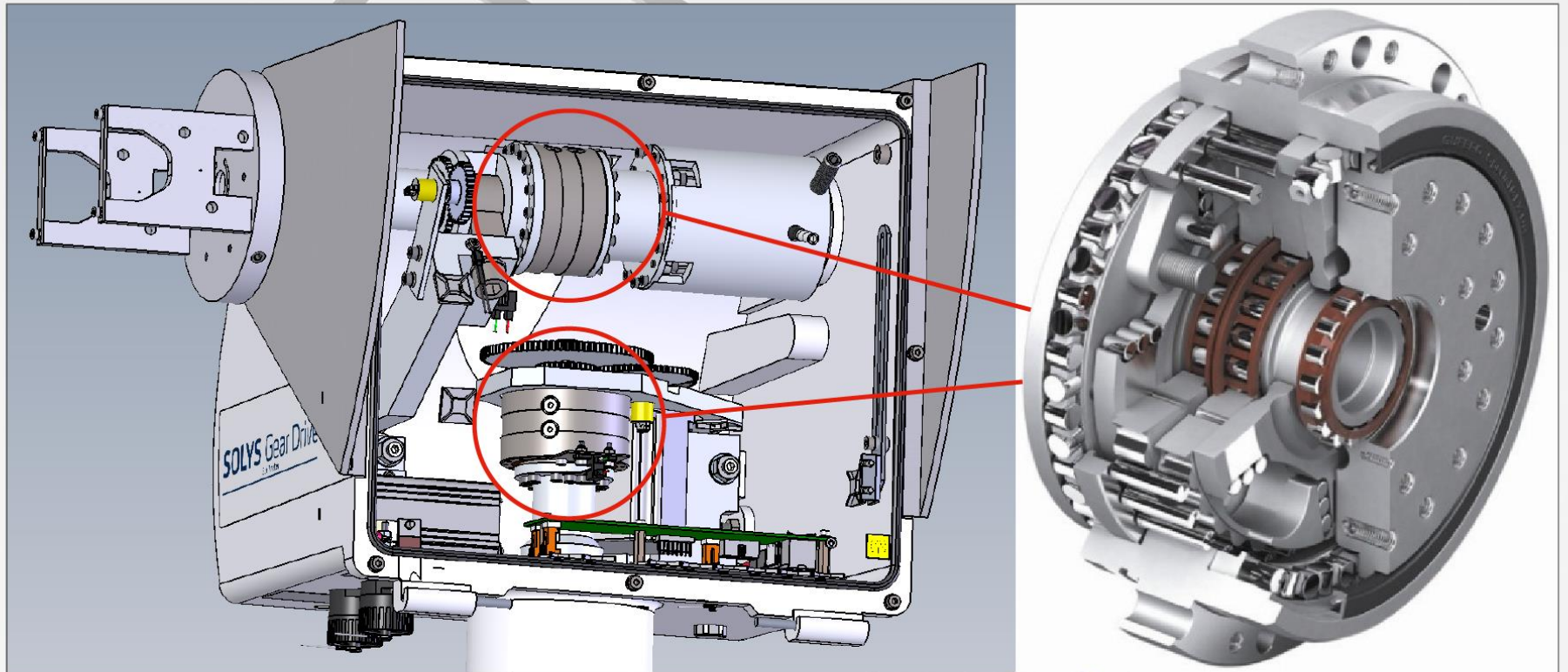


The image features a light gray background with a faint, large-scale image of a sun tracker. The sun tracker is a mechanical device with a central base and two long, thin arms extending upwards, each ending in a spherical ball. The title "Sun Tracker Overview" is positioned in the upper right quadrant in a bold, black, sans-serif font.

Sun Tracker Overview

	SOLYS Gear Drive	2AP	SOLYS 2
Torque	60 Nm	40 Nm	20 Nm
Pay Load balanced	80 kg	65 kg	20 kg
Temperature Range	-50 °C to +60 °C	-50 °C to +50 °C	- 20 °C to +50 °C
ESD - test	20 kV	3 kV	3 kV
Sun Sensor	Standard	Option	Option
GPS	Yes	No	Yes
Communication	Ethernet / RS-485	RS-232	Ethernet
Status info	Automatic	-	On request
Mechanical life time	>20 year, maintenance free	10 year, maintenance yearly	10 year

SOLYS Gear Drive - Inside



SOLYS Gear Drive • Reduction Gears

Advantages

High load torque

No backlash

Excellent accuracy

Long lifetime

No maintenance





SOLYS Gear Drive • Communication

Ethernet and RS-485 interfaces for outdoor use

- highest immunity for disturbance

Ethernet with fixed or auto IP address

Reset for changed / lost IP address (via RS-485)

Windows software for:

- viewing and logging of status and tracking information
- find SOLYS on your network
- start Explorer with SOLYS web page



SOLYS Gear Drive ▪ Status Message

SOLYS name / serial number

GPS time, date and position

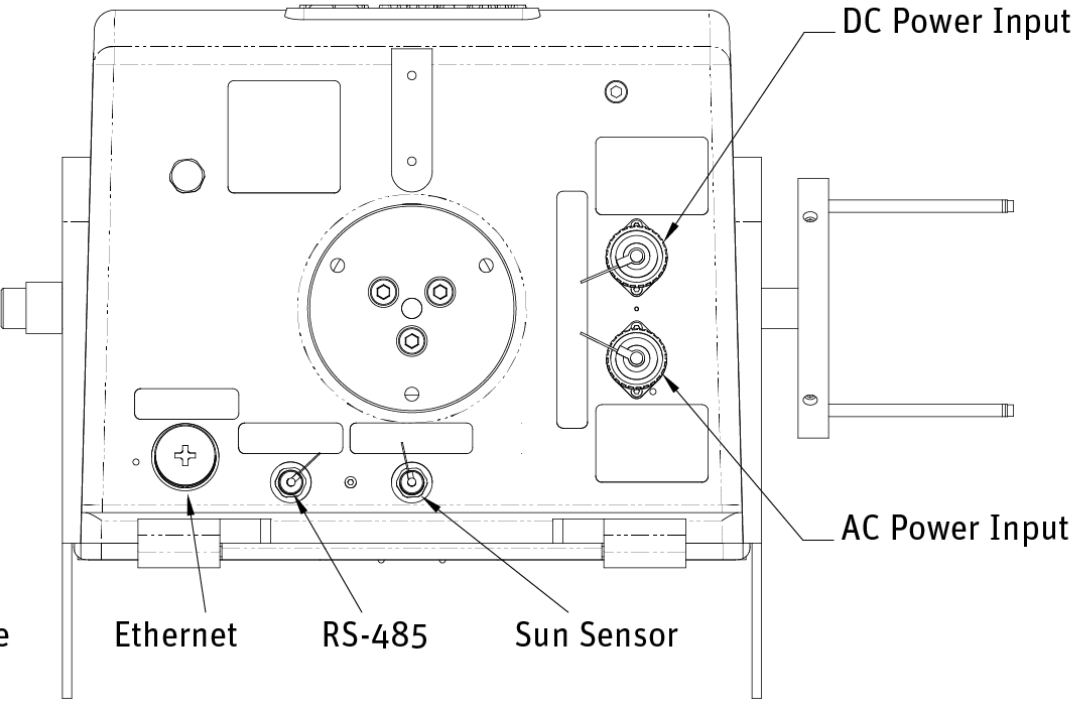
Solar Azimuth, Zenith angle

SOLYS Axis Azimuth and Zenith angle

Instrument status

Motor status

SOLYS Gear Drive • Connections



Bottom side of the SOLYS Gear Drive

Ethernet

RS-485


Sun Sensor

DC Power Input


AC Power Input

SOLYS Gear Drive • Software

Add SOLYS Remove SOLYS




KIPP & ZONEN
SINCE 1830



SOLYS 2

Tracking Status Instrument Status Configuration Browser



SOLYSGD001

HostName	SOLYSGD1500003
Date	2015/10/03
Time	09:35:33
Status code	Suntracking <ul style="list-style-type: none">• Using last received latitude, longitude and annual mean pressure• System clock synchronized• Sun Sensor intensity < 300 W/m²
Solar angle azimuth	-164.735831
Solar angle zenith	59.489204
Axis angle azimuth	195.230042

SOLYS Gear Drive • Accessories

Cold Cover



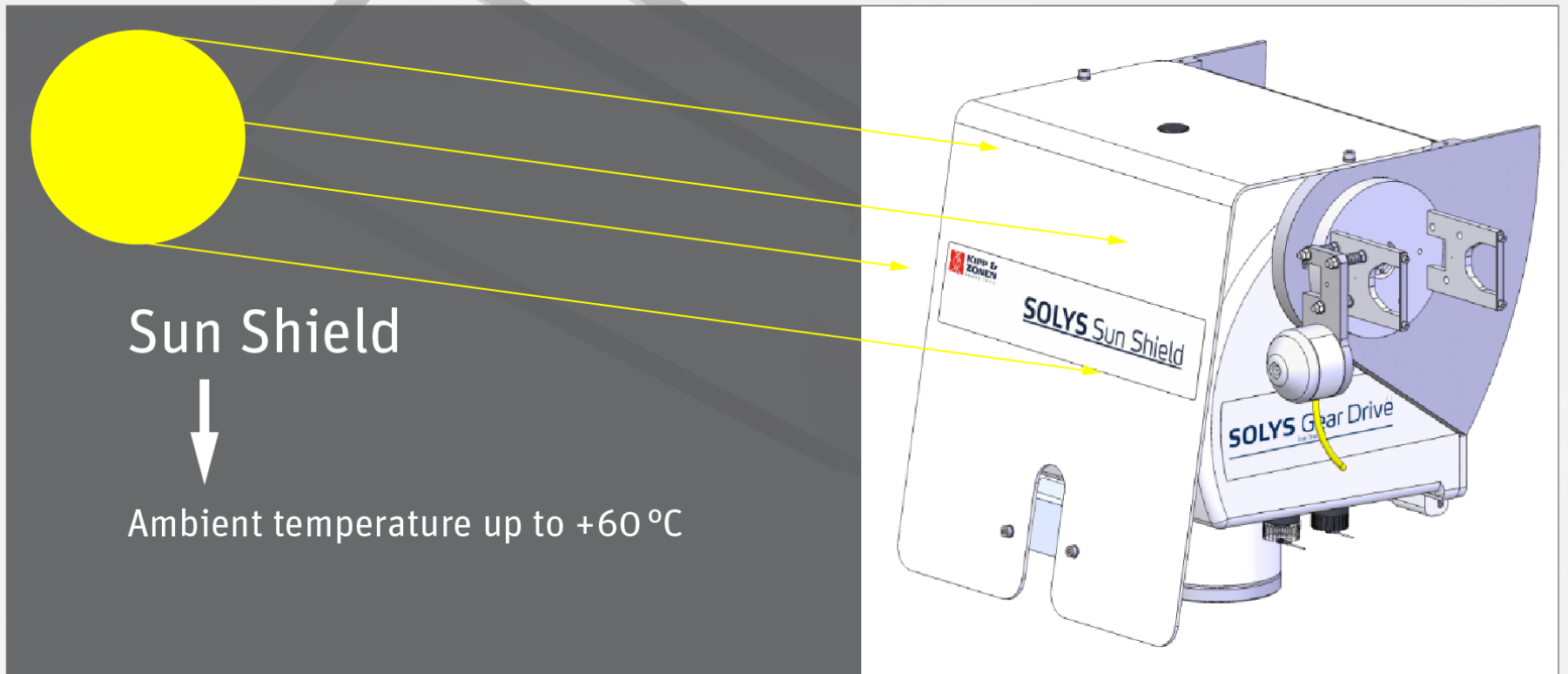
Standard 150 W heater integrated



Operation down to -50°C and
20 m/s wind speed



SOLYS Gear Drive • Accessories



SOLYS Gear Drive • Advantages

Pay load up to 80 kg

Torque 60 Nm

Increased temperature ranges

- -50°C to +60°C
- Standard 150 W heater (AC)
- Cold Cover or Sun Shield

Improved communication

- Protected Ethernet
- Isolated RS-485
- Software for logging status info

Extended status messages

Two types of tripods available

Sun Sensor included

Best price/performance ratio





Questions?



Passion for Precision

in the measurement of Solar Radiation and Atmospheric Properties