



# 2 axis high precision solar trackers



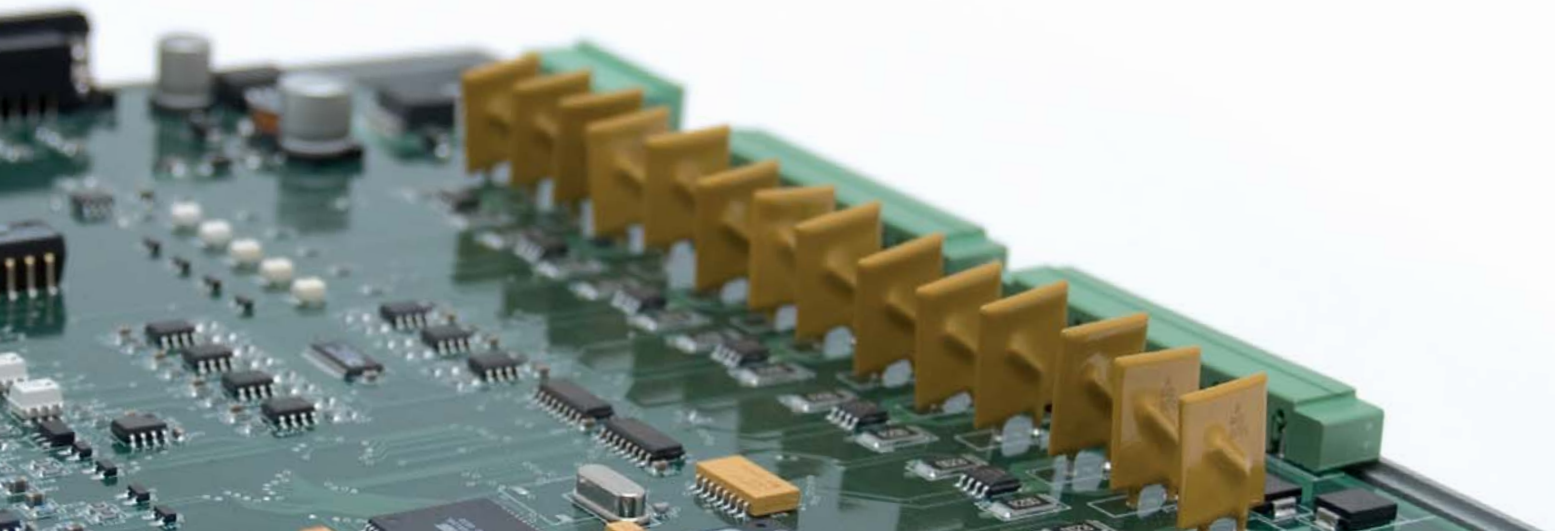
The SUNTRACK controller is a device based on microcontroller ECU (Electronic Control Unit), designed for high precision two axis tracking systems. It is indicated for all kind of photovoltaic modules, including concentration panels and heliostats.

The SUNTRACK control modules, which work in an open-loop, calculate the Sun position both in Azimuth and Altitude, with a precision of 0.01°. In close loop, the system has a solar sensor that works when there is enough direct sun and implements an auto adjust function that calculates the difference in position between the sun and the photovoltaic tower. On this way, there is no need of performing a precise mechanical adjustment between the solar sensor and the photovoltaic tower.

The solar controller has one port for RS 485 MODBUS communication. The local port is used to define software configuration, including installation and maintenance tasks. And the remote port allows the integration of the Suntrack controller into the solar plant monitoring software.

## Technical Characteristics

Digital inputs	4
Digital inputs protection	Optoisolated
Digital outputs	4
Digital outputs capacity	24Vcc 1A
Digital outputs protection	Over current, inverse polarity, contact short-circuit
Analog inputs	1
Analog outputs	2
Incremental encoders inputs	2
Communication ports	1 MODBUS RS485: 1 isolated
System accuracy	<0.1°
Temperature of work	from -40° to +85°
Relative humidity	95%



# Configuration Software

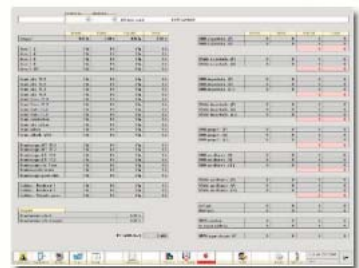
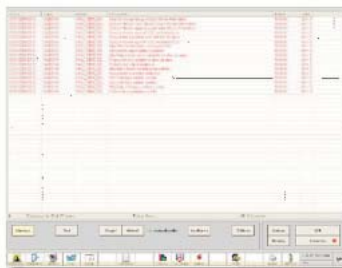
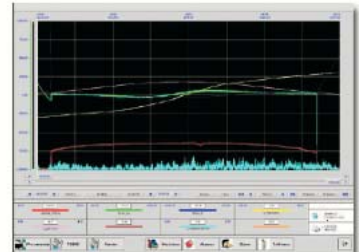
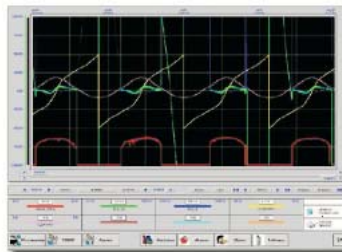
The configuration software for PC allows the installer to define the internal parameters and to visualize them on the SUNTRACK screen.



# Monitoring Software

The monitoring software incorporates a powerful management and monitoring SCADA system, which offers GSM, GPRS and/or ADSL Internet remote communications.

The system includes GPS (Global Position System) for precise synchronization of real time clocks needed for the photovoltaic park controllers. This synchronization is important to work with the highest precision calculating the sun position. The monitoring system visualizes and registers the most representative parameters of the solar plant, generating electrical production reports, alarms and operating times.





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