HELIOSLITE

HeliosSense / Intelligent monitoring of your installations

Fast commissioning without cable

Wi-Fi

Mobile App for set-up

MADE IN FRANCE

- **Wireless communication** Wifi, Bluetooth + 4G router
- **Self-powered** by solar cell + Li-ion battery
- Built-in 3D accelerometer
- High-frequency measurement campaigns triggerable on threshold
- Real-time data processing algorithms (e.g. FFT)
- Control of external loads (motors, heating resistors, etc.)
- Automatic Alert Generation
- Over-the-air software updates
- Online data access via a monitoring portal

Examples of applications

Application: Monitoring of floating solar power plants
Measurements: Tension of anchor lines and analysis of dynamic float movements
Sensors: Load cell, inclinometer, wave sensor, wind sensor, current-voltage sensor

Application: Data acquisition on isolated sites
Measurements: High Mountain Weather Station
Sensors: Pyranometer, Ultrasonic Wind Sensor, Temperature Probes
Options: Control of heating resistors to defrost the sensors

About HeliosLite

Since 2013, HeliosLite has been designing complete and patented systems of photovoltaic structures and related solutions that integrate technologies resulting from the R&D work carried out by its engineers. Installation manuals and videos for these products are available on www.helioslite.com

HeliosSense standalone multi-sensor data logger

Dimensions	Single format: 110x80x65mm, Double format: 170x80x65mm
Housing IP rating	Gray polycarbonate IP67
Power supply	0.5W solar cell + Li-Ion 3.7V battery
Communication protocol	Wifi + 4G router
Set-up interface	Android Application + Bluetooth communication
Temperature range	-20°C to 45°C
Accelerometer	Measuring range $\pm$ 1g on 3 axes, 12 bits resolution
Inclinometer	Measuring range $\pm$ 90° on 2 axes, $\pm$ 0.05° resolution

Current-voltage measurement sensor

Sensor Type	Voltmeter and digital ampmeter
Measuring range	0-120V, 0-12A
Electrical insulation	> 2000 V
Resolution converter	24 bits
Calibration uncertainty	< 1 %

Load Cell

Sensor type	Tensile and compressive force measurement
Rated load	10 kg to 10 t
Power supply	5V generated by a DC-DC converter integrated in the HeliosSense
Resolution converter	24 bits
Measurement accuracy	$\pm$ 0.1 %
IP Rating	IP68

Irradiance sensor

Sensor type	Pyranomètre classe 2 – ISO 9060
Measuring range	0 to 1,600 W/m²
Spectral band	285 to 3,000 nm
Power supply	5V generated by a DC-DC converter integrated in the HeliosSense
Calibration uncertainty	< 1.8%
IP Rating	IP68

Wind speed sensor + wind vane

Sensor type	Ultrasonic wind sensor
Measuring range	0 to 40 m/s
Wind Direction	0 to 359 °
Power supply	3.3V generated by a regulator integrated in the HeliosSense
Resolution	0.12 m/s, 1°
Calibration uncertainty	< 1.8%
IP Rating	IP67

Intuitive online interface for accessing the sensor data via a monitoring portal: