

# POLITRACE SOLAR

## POLITRACE FOR ENERGY

As Oryx Data, we care about the world, energy, and people. We try to protect nature and future generations by producing alternative autonomous solutions using renewable energy, considering the unique needs of our customers. We meet your needs with reliable technology and innovative financial models.

Politrace extends the use of renewable energy with high-quality standards that anticipate the errors in the system and inform the user in advance, calculate the correct amount of energy and make the investors happy, and finally, contribute to the reduction of carbon emissions.

## WHAT DOES POLITRACE OFFER FOR YOU



Reduction of consumption-related costs



End-to-end intelligent solutions with prediction of potential failures



Forecasting of the energy production



Reliable facility, long-lasting high performance



Collecting data for new perspective



# POLITRACE SOLAR HOW IT WORKS?

## PHASES

### 1 Sensors

- ▶ Temperature and Pressure
- ▶ Wind and Dust
- ▶ Voltage and Current
- ▶ Humidity

### 2 Monitoring

The parameters are sent to the Politrace server, where the expert system, predicts faults

### 3 Software

For monitoring the status of the assets, reception fault messages and displaying parameters monitored and characteristic of the asset.

### 4 App

Politrace mobile or web app to configure the sensor, the communications network and receive alarm faults messages.

## TECHNICAL SPECIFICATIONS

### Solar sensor

Ambient temperature:	LM35 0-70°C
Irradiance:	0 - 1500 W/m <sup>2</sup>
Wind speed:	0 - 32.4 m/s
Surface temperature:	0 - 100°C
Humidity:	0 - 100%
Dust level:	0 - 0.6 mg/m <sup>3</sup>
Voltage:	0 - 40 V

### Communication

Interface:	RS-485
Serial baud rates:	9.6, 19.2, 38.4 k
Data format:	8 data bits
Protocol:	Modbus RTU

### Temperature sensor

Measuring range:	-40°C to +105°C
Resolution:	1°C
Accuracy:	±3°C

Operating the sensor at higher voltages can induce internal heating that can reduce the accuracy

### Wireless communication

Radio standard:	802.11 b/g/n
Network standard:	Wi-Fi b/g/n
Frequency:	2,4GHZ - 2,5GHZ
Data rate:	150 Mb/s
Out rate:	20 dbm
Range (nominal):	>20