ENTEC SOLAR

E-Dust

Soiling Sensor **Entec Solar**

Measure your exact soiling losses and optimize your cleaning campaigns.



E-Dust compatible with PVET Data Analytics solution

- Know your exact soiling losses by measuring the maximum power point and not just the short circuit current
- Up to one minute measuring sample period to obtain losses dependent on the incident angle
- Automatic compensation of temperature differences between modules
- Automatic calibration of the reference modules
- Excellent accuracy on the MPP measurement

Technical Specifications E-Dust

Maximum input voltage	80V
Maximum input current	25A
Maximum recommended voltage @STC	65V
Maximum recommended current @STC	20A
Number of inputs	2
Measurement uncertainty	±0.3% (V & I) / ±0.5% (P)
Measurement resolution	2.5mV/0.3mA
Temperature measurement	IEC 60894-5 Voc method (standard) 2 x Pt1000 sensor (optional)
Communication	ModBus or Direct TCP/IP
Communication ports	RJ45
IP protection	IP67 & IP51 versions
Power input	
Voltage	12V/24V DC
Consumption	200mA @12V
Weight	1.0 kg
Dimensions	215 (244) x 150 x 60 mm (x-y-z)

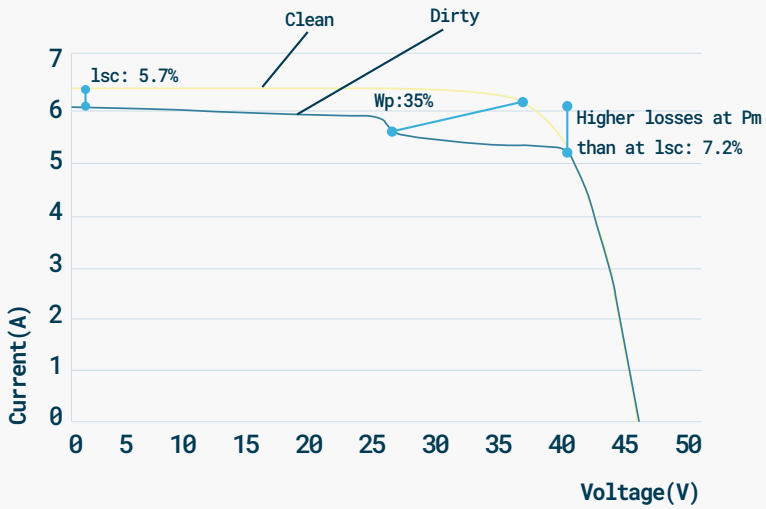


Clean and Dirty Module's I-V Curves

Non-homogeneous dirt patterns



Dust patterns corresponding to the I-V curve on the right

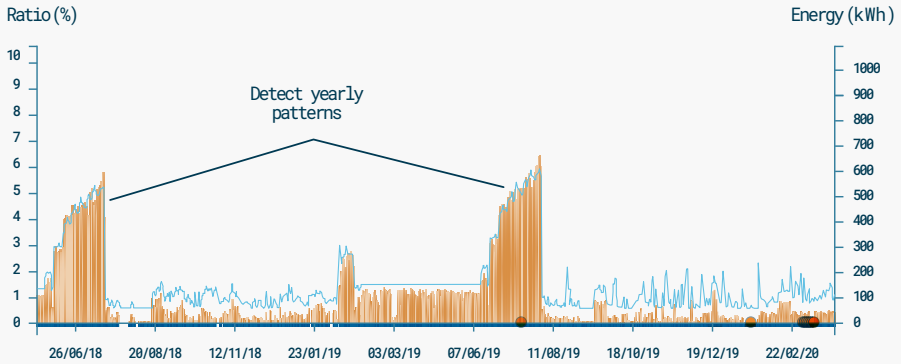


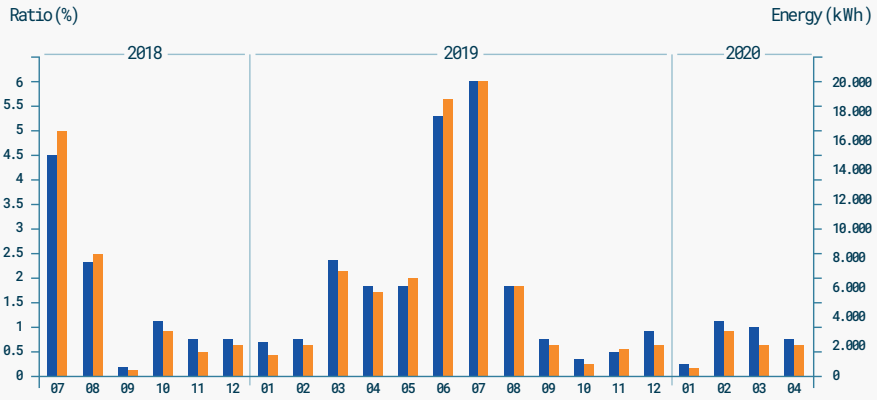
E-Dust compatible with PVET Data Analytics solution

The information collected by the E-dust can be automatically visualized and processed in the digital platform for solar asset evaluation, PVET Data Analytics.

PVET PhotoVoltaics Evaluation Tool

Optimize your cleaning campaigns by dectecting soiling patterns with the PVET® Software.

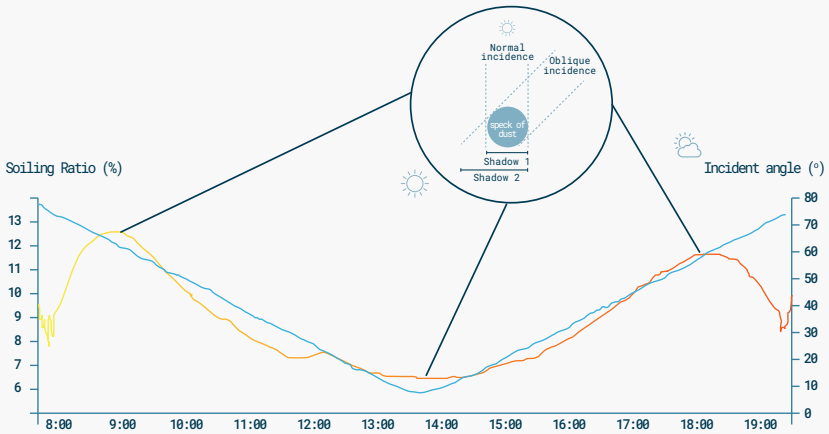




PVET® analyzes the E-Dust measured data and returns your daily, monthly and yearly losses.

Hourly losses are also measured and considered when calculating the real energy losses with respect to the PV plant power limitations.

The incident angle has a great impact on the soiling loss and this is also considered in the E-Dust measurements.



“Innovative technological developments for the photovoltaic solar energy industry”

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