



Patented Non-Optical Dust Sensor
(24h/7 day and night measurements)



Measurement of any obstructing matter



Increased ROI



Improvement Solar efficiency



Daily Energy Loss Rate due to soiling



Machine Learning: optimal cleaning schedule

It has been shown in several studies that PV Panels soiling causes more than 10% loss of solar energy efficiency. Maintenance and cleaning operations of PV panels installed in areas exposed to dust represent a huge operating cost of solar plants. Digital optimization solutions for PV cleaning costs are highly sought by solar field operators.

DUST-OUT[®] is a PV Soiling monitoring solution based on IoT, it provides connected monitoring of PV panel soiling thanks to its new technology of non-optical Dust Sensor. This technology provides with insights into the power loss due to soiling and dust ratio. The dust sensor is built on planar meta-material array of micro-dielectric mono sensors that provide high sensitivity regarding to the dust particles deposited on the top layer of the sensor array. This non-optical technology doesn't need sun to detect soiling ratio and can be used for 24h/7 day and night measurements at any place. The DUST-OUT is the unique soiling monitoring solution that helps operators to decide about when and where the cleaning operations must be performed.

