

SOLAR TECHNOLOGIES



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A-PAA





Using ARTIFICIAL INTELLIGENCE models, the Enertis Applies+ Advanced Performance Analytics Application (A-PAA) performs a faster, more detailed analysis of the long-term PERFORMANCE of PV plants

KEY FEATURES

- underperformance detection
- long-term average annual degradation calculation
- site-specific soiling rate calculation

BENEFITS

- fast and detailed analysis of PV assets' performance
- performance comparison
- interactive visualisation
- identification of recoverable unavailability and systemic underporformance

DATA INTEGRATION

• it can process any type of data format, allowing the integration of multiple PV plants with different SCADA systems



TESSA





Based on the Kimber and Townsend models, the Enertis Applus+ Soiling and Snow Application (TESSA) estimates the annual LOSS IN SOLAR ENERGY production due to DIRT and SNOW accumulation

KEY FEATURES

- annual, monthly, and daily soiling rates
- clients' own weather data can be uploaded
- connection to US and Spanish meteorological agencies
- map view for easy asset comparison

BENEFITS

- accurate estimation of soiling rate to optimise cleaning schedules
- ability to run scenarios for cleaning schedules, including automated solutions

USEFUL FOR PLANNING PHASE

• it uses historical data to calculate soiling accumulation profiles



SMART PV INSPECTION TOOL





Combining DRONES and AI MODELS with INFRARRED (IR) THERMOGRAPHY, the Enertis Applus+ Smart PV inspection tool can quickly IDENTIFY DEFECTS in installed PV modules

KEY FEATURES

- processes thousands of images in minutes
- identifies and geolocates defects
- comprehensive report within days for quick response

BENEFITS

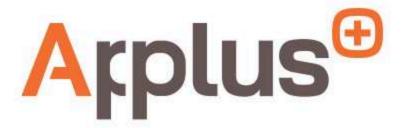
- high-detail PV module analysis
- single asset reports or comprehensive portfolio overviews
- ability to track faulty modules over time with subsequent inspections

COMPREHENSIVE TECNICAL INSPECTION

• it is used on PV modules at operating solar PV assets to ensure proper maintenance



PV MOBILE LAB





Enertis Applus+ PV MOBILE LABORATORY brings the most accurate solar testing and solar inspection techniques ON-SITE at solar plants

KEY FEATURES

- it enables on-site testing of PV modules under stationary laboratory conditions
- it can perform testing of bifacial and large solar PV modules
- equipped to perform electroluminescence and maximum power point tests
- available in Chile, Mexico and Europe. Soon available in Australia and Brazil

BENEFITS

- it avoids risks associated to module shipping and handling
- it reduces module downtime





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