⯈ Smart I-V Curve Diagnosis

Smart I-V Curve Diagnosis is able to carry out online I-V curve analysis on entire strings with advanced diagnosis algorithm. The scanning would help to find out and identify the strings with low performance or malfunction, which would help to achieve proactive maintenance, higher O&M efficiency and lower operation cost.

Smart

- Support plant-level, array-level and inverter-level analysis and diagnosis
- Support scheduled scanning and proactive presentation of reports
- Automatically identify different failure types and provide recovery suggestion
- Support export of ROI estimation reports and assist in accurate O&M
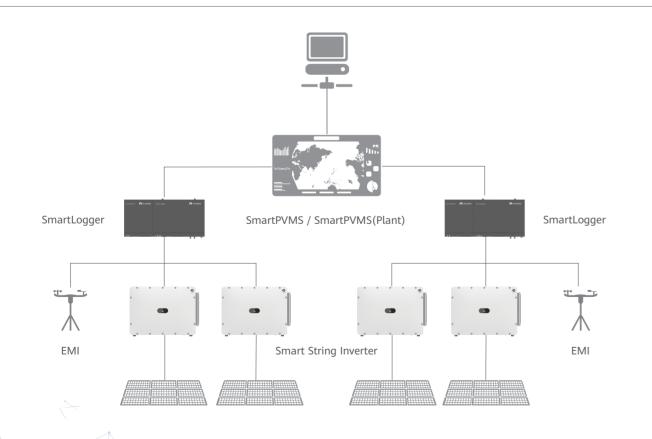
Efficient

- One-click scanning without onsite experts or equipment
- SCompleting online I-V curve scanning on all strings
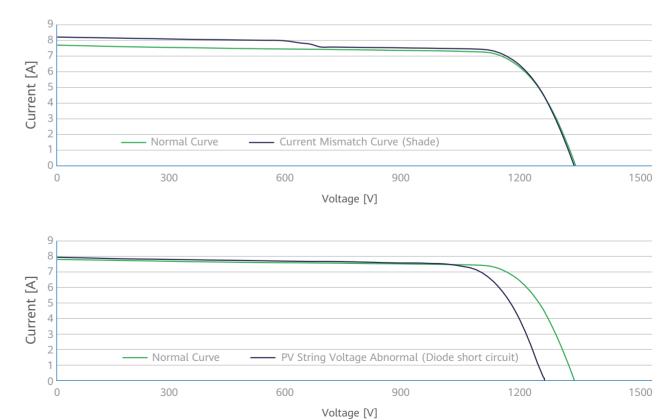- Identification rate, recurrence rate, cause Identification accuracy > 95%

Network Structure

SmartLogger   SmartPVMS / SmartPVMS(Plant)   SmartLogger

EMI   Smart String Inverter   EMI

Technical Specifications	
Smart String Inverter	SUN2000-330KTL-H1, SUN2000-330KTL-H2, SUN2000-215KTL-H0...
Data Logger	SmartLogger3000
SmartPVMS, SmartPVMS(Plant)	SmartPVMS, SmartPVMS(Plant)
Sampling Points per I-V Curve	128
Voltage Accuracy	0.5%rdg. + 1dgt. (rdg.>5, dgt.= 0.3)
Current Accuracy	0.5%rdg. + 2dgt. (rdg.>0.3, dgt.= 0.006)
	Smart I-V Curve Diagnosis Verified by TÜV

String-level Management	Smart I-V Curve Diagnosis
Real Time Detection	Fault Analysis

String I-V Curve Comparison

Normal Curve — Current Mismatch Curve (Shade)

Normal Curve — PV String Voltage Abnormal (Diode short circuit)