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 faults, 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
  - Automatically identify different failure types and provide recovery suggestion

- **Efficient**
  - One-click scanning without onsite experts or equipment
  - Online I-V curve scanning on entire strings of 5 MW plant within 5min
  - Automatic report generation of 5 MW plant within 15min

**Network**

- One Click Scanning
- Smart I-V Curve Diagnosis Report
- FusionSolar
  - Smart PV Management system
- SmartLogger
- Weather Station (optional)

Connections:
- WLAN
- Ethernet
- 3G/4G
- RS485
## Smart I-V Curve Diagnosis

<table>
<thead>
<tr>
<th>Technical Specifications</th>
<th>Smart I-V Curve Diagnosis</th>
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<tbody>
<tr>
<td>Communication</td>
<td>SmartLogger2000, SmartLogger1000A, SmartLogger1000, Smart Dongle</td>
</tr>
<tr>
<td>Management System</td>
<td>FusionSolar Smart PV Management System, NetEco1000s</td>
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<tr>
<td>Scanning Time</td>
<td>&lt; 1s (1 string)</td>
</tr>
<tr>
<td>Sampling Points per I-V Curve</td>
<td>128</td>
</tr>
<tr>
<td>Certification</td>
<td>TÜV Rheinland*, TUV</td>
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</tbody>
</table>

* I-V curve diagnosis is not supported when inverter is connected with power optimizer.

### String-level Management

- **Real time monitoring**
- **Fault Analysis**

### String I-V Curve Comparison

*Normal Curve*

*Abnormal Curve with String Current Mismatch*

*Abnormal Curve with shading on Modules*

*Abnormal Curve with String Current Mismatch*