Smart I-V Curve Diagnosis on the NetEco 1000S

Huawei Technologies Co. Ltd.

Version	Created by	Date	Remarks
01	Huawei e84081311	08.11.2018	

The smart I-V curve diagnosis function allows you to check the health status of strings for the inverters connected to the NetEco 1000S.

Pre-requisites

-You have logged in to the NetEco 1000S.
-You have logged in as the system administrator, manager, or installer.
- String parameters have been configured for inverters.
- The inverter license controls the smart I-V curve diagnosis function. To ensure that smart I-V curve diagnosis works properly, perform scheduled inspection and import the inverter license file.

Suggestions and Restrictions

The following conditions should be met to ensure normal use of the Smart I-V Curve Diagnosis function; otherwise, scanning will fail or be abnormal:
-The day is sunny with stable sunlight. The irradiance is at least 600 W/m2.
-The cleaning status of PV modules is consistent for a diagnosis task.
-The PV modules are clean and dry. Recommended: start the function after PV modules are cleaned or heavy rain has stopped.
-The PV modules in the same array have an identical type and model. Every PV string has the same number of PV modules connected in series.
-Currently, the supported type of PV modules is common mono crystalline silicon or common polycrystalline silicon.

Procedure

Step 1   Setting string details

Choose Monitor menu→select one inverter→Settings→String details setup→fill the requested data for your PV panel installed→Batch Apply
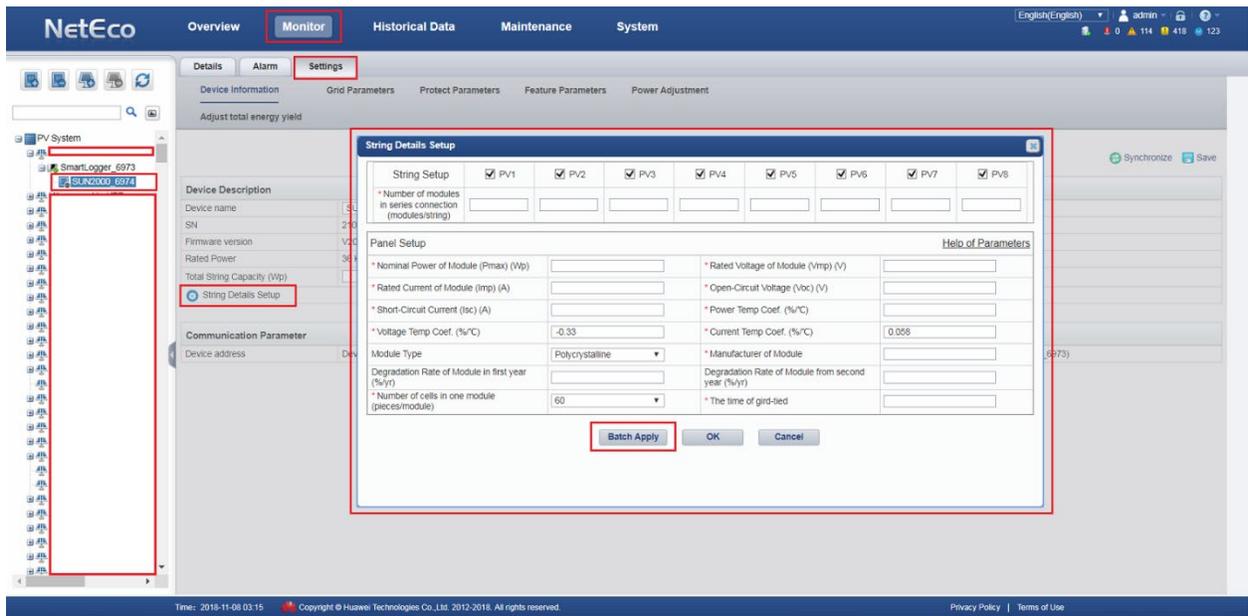
Step 2   Loading license

Choose Maintenance→Device License Management→Upload License→Browse the file from your computer and Upload
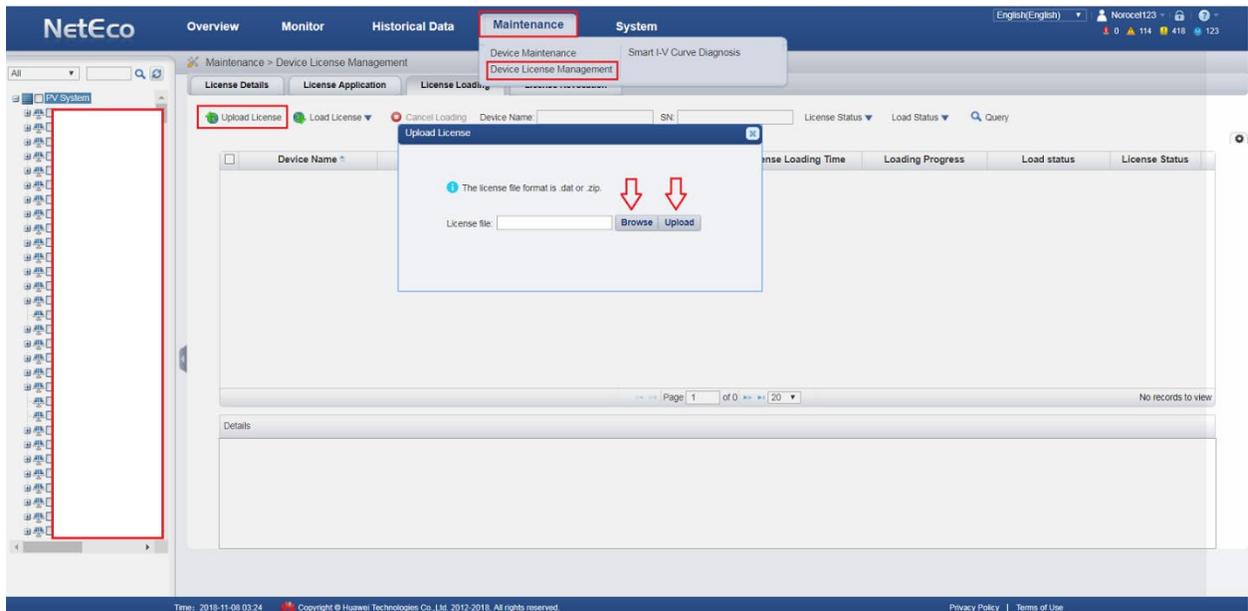
After you upload the license select Load License→Load all and confirm
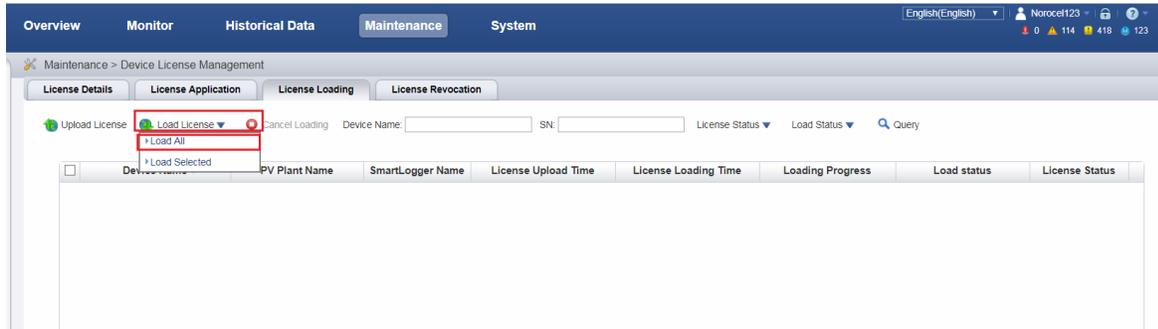
Step 3   Smart I-V Curve Diagnosis

Choose **Maintenance→Smart I-V Curve Diagnosis** from the main menu.
The **Smart I-V Curve Diagnosis** page is displayed:
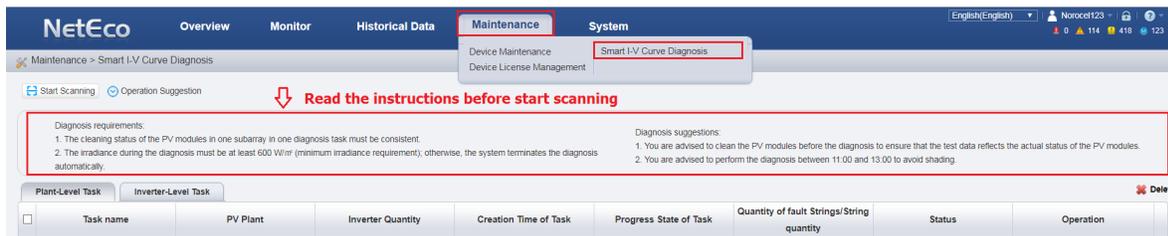
Step 4   Start Scanning.

Click Start Scanning and The **Settings of Task** page is displayed:
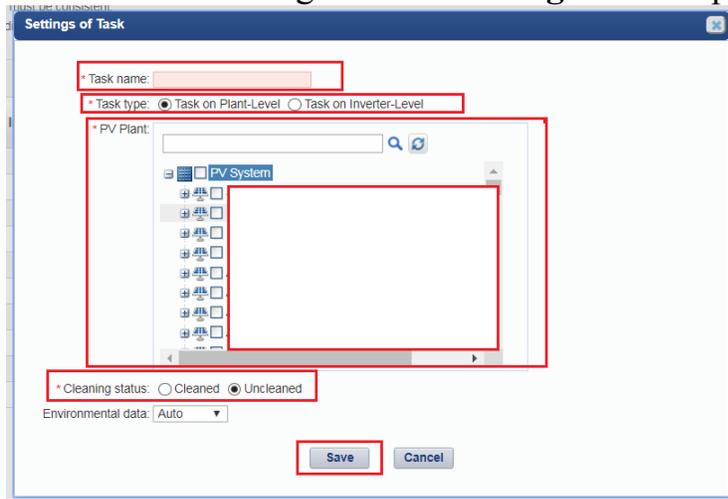
- **Task name:** Set this parameter to a string of a maximum of 64 characters.
- **Task type:**
1. Task On Plant-Level: The health check applies to strings for all inverters connected to a PV plant.
2. Task On Inverter-Level: The health check applies to all strings for an inverter.
- **PV plant:** In the PV plant area, select the SmartLoggers or inverters to be scanned.
1. An unlimited number of SmartLoggers can be scanned simultaneously.
2. A maximum of 100 inverters can be scanned simultaneously.
- **Cleaning status:** Specifies the cleaning status of a string. Select a value as required.
- **Environmental data:**
1. Auto: The system will automatically calculate the values of
Irradiance and Temperature of panel.
2. Manually: You need to manually enter the values of
Irradiance and Temperature of panel.
-**Click Save**

After a task is set, smart I-V curve diagnosis starts immediately:

	Task name	PV Plant	Inverter quantity	Creation Time of Task	Progress State of Task	String quantity	Quantity of fault Strings	Status	Operation
☐	⊖ test1	-	13	2017-12-21 11:26:51	35%	0	-	In progress	●
	└ SmartLogger_22	wy	13	2017-12-21 11:26:51	35%	0	-	In progress	

Step 5   View the diagnosis result and diagnosis details.

1. View the diagnosis result

Click under Operation column. The diagnosis task execution result is displayed:

2. View the diagnosis details

Click Read The Details. The diagnosis details are displayed: