

# Dust Analysis System 2.0 (DAS 2.0) Maintenance Instruction

Document No.: 20240722\_internal\_main\_das2.0\_v1.1  
July, 2024



**Partner  
for  
Progress**

## Issue and Revision Records

Revision	Date	Prepared by	Verified by	Approved by
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1.1	2024/7/22	Sandy Wu	Fred Chen	

**Document No.** 20240722\_internal\_main\_das2.0\_v1.1

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## 1. Preface

- ▶ Please read this instruction manual carefully before you start installing the machine.
- ▶ You are kindly requested to read this manual thoroughly, to follow the instructions given and for safety reasons, avoid controlling, adjusting or performing procedures other than those specified.
- ▶ The instruction manual contains important information on how to operate the machine safely properly and most efficiently. Observing these instructions helps to avoid danger.
- ▶ These operating instructions must be applied by any person in charge of carrying out work with and on the machine ,such as
  - Operation including setting up, troubleshooting in the course of work, care of consumables
  - Maintenance (servicing, inspection, repair) and /or transportation
- ▶ This machine is designed and built in full compliance with the safety standard, please read the corresponding manual carefully before operating the machine.
- ▶ In addition to the operation instructions and to the mandatory rules and regulations for accident prevention and environment protection in the country and place of use of the machine, the generally recognized technical rules for safe and proper working must also be observed






## 1.1 Periodical Inspection & Maintenance

This section provides the basic periodical maintenance information for Dust Analysis System (DAS) examination during system maintenance to maintain an optimum level of performance of the system. General maintenance should be performed on a regular schedule and must include a visual inspection and routine maintenance.

No.	Item Name	Frequency	Explanatory Section
1	Visual Inspection (Check for abnormalities) <ul style="list-style-type: none"><li>– DAS System</li><li>– Electric Actuator</li></ul>	1 Time/Month	1.2.1
2	Surface Clean of Mini PV Modules	Upon Customer O&M Schedule	1.2.2



## 1.2.1 Visual Inspection

Item Name	Inspection Description	Indicative Photograph
<p><b>DAS System</b></p>	<p><b><u>POSITION</u></b> The set-up location of DAS system</p> <p><b><u>PROCEDURE</u></b></p> <p>① Check the surrounding of DAS system. Any obstacles or debris found must be removed and cleaned. For example, remove any animals nest.</p> <p>② Make sure the DAS is not shaded by trees ,grass or other objects.</p> <p>③ Make sure all fixing screws are tight.</p> <p>※The frequency of inspections can be adjusted depending on environmental conditions</p>	
<p><b>Electric Actuator</b></p>	<p><b><u>POSITION</u></b> As shown in the photo on the right side ,the actuator is located within the red frame.</p> <p><b><u>PROCEDURE</u></b></p> <p><b>STEP1</b> : Use the lever switch to move the actuator</p> <p><b>STEP2</b> : Make sure the actuator moves smoothly.</p>	 



## 1.2.2 Surface Clean of Installed PV Modules

Item Name	Inspection Description	Indicative Photograph
<p><b>Maintenance of Mini Cleaned Modules.</b> <i>(regular work)</i></p>	<p><b>POSITION</b> Cleaned mini PV modules are installed on DAS.</p> <p><u>Frequency(regular work)</u> 1 Time/Month</p> <p><b>PROCEDURE</b> <b>STEP1</b> : Open the cleaned panel with Lever switch manually</p> <p><b>STEP2</b> : clean the panel.</p> <p><b>STEP3</b> : Close the cover when cleaning is complete.</p>	<p><b>Soiled PV</b> exposed to outdoor environment for dust collection (same with PV arrays)</p> <p><b>Cleaned PV</b> kept under cover to maintain surface clean</p>
<p><b>Maintenance of Installed Mini PV Modules.</b> <i>(After PV module cleaning )</i></p>	<p><b>POSITION</b> Two mini PV modules are installed on DAS.</p> <p><u>TIMING</u> when PV power plant undergoes PV module cleaning procedure.</p> <p><b>PROCEDURE</b> <b>STEP1</b> : Ensure on-site panel cleaning has been carried out</p> <p><b>STEP2</b> : Open the cleaned panel with Lever switch manually</p> <p><b>STEP3</b> : Clean the surface of both installed PV modules on DAS simultaneously</p> <p><b>STEP4</b> : Close the cover when cleaning is complete.</p>	<p><b>Soiled PV</b> exposed to outdoor environment for dust collection (same with PV arrays)</p> <p><b>Cleaned PV</b> kept under cover to maintain surface clean</p>

※The frequency of inspections can be adjusted depending on environmental conditions



## Appendix - Maintenance Record Sheet

Please use the format sheet below to record the maintenance history for reference.

【 Maintenance Record Sheet of DAS 】		
<ul style="list-style-type: none"> <li>▪ <b>System Location :</b></li> </ul>		
<ul style="list-style-type: none"> <li>▪ <b>Maintenance Date :</b></li> </ul>		
<ul style="list-style-type: none"> <li>▪ <b>Inspection By :</b></li> </ul>		
No	Item	Status Check After Maintenance
1	Surface Clean of Installed PV Modules	<input type="checkbox"/> No obstacle or debries is/are existent
	Make sure the DAS is not shaded	<input type="checkbox"/> No shaded by trees ,grass or other objects.
	Make sure all fixing screws are tight	<input type="checkbox"/> All fixing screws are tight
	Electric Actuator	<input type="checkbox"/> No abnormalities
2	Maintenance of Mini Cleaned Modules. (1 Time/Month)	<input type="checkbox"/> Cleaned module is clean
3	Maintenance of Installed Mini PV Modules. (After PV module cleaning )	<input type="checkbox"/> Soiling module is clean <input type="checkbox"/> Cleaned module is clean



