

# RDE300i Software Updates

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## RDE300i Configuration Manager Software

### Overview

RDE300i Configuration Manager Software (500092) allows you to configure, test, and normalize your RDE300i units. The software runs on a Windows PC or laptop.

### Version History:

| Version Number | Release Date | Release Notes                                                                                                                                                                                                                                                       |
|----------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R7546          | 2025-09-23   | <ul style="list-style-type: none"><li>Improved Normalization</li></ul>                                                                                                                                                                                              |
| R7532          | 2025-08-20   | <ul style="list-style-type: none"><li>Improved Normalization UI</li><li>Added support for Cell Wash</li></ul>                                                                                                                                                       |
| R7437          | 2025-05-02   | <ul style="list-style-type: none"><li>Improved user interface</li></ul>                                                                                                                                                                                             |
| R7258          | 2024-10-24   | <ul style="list-style-type: none"><li>Support for improved IV curve fit in Firmware</li><li>Improved support for AUX devices</li></ul>                                                                                                                              |
| R7067          | 2024-08-13   | <ul style="list-style-type: none"><li>Added a support button to recover from Event Code 8 or 9</li><li>Added a message to be displayed for new Event Code 9</li><li>Support for updated Isc/Voc mode and legacy mode with disconnect</li></ul>                      |
| R6935          | 2024-06-28   | <ul style="list-style-type: none"><li>Improved firmware update &amp; support features</li><li>Minor bug fixes</li></ul>                                                                                                                                             |
| R6880          | 2024-05-23   | <ul style="list-style-type: none"><li>Improved firmware update &amp; support features</li></ul>                                                                                                                                                                     |
| R6661          | 2024-01-12   | <ul style="list-style-type: none"><li>Improved advanced settings dialog and help screen</li><li>Improved configuration options dialog</li><li>Added rear irradiance uniformity threshold</li><li>Added event queue viewer for troubleshooting and support</li></ul> |

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| R6619 | 2023-11-08 | <ul style="list-style-type: none"> <li>Added more detailed Help information for Advanced settings dialog</li> <li>Added support to display event code 8 for firmware R6611 and higher</li> </ul>                                                                                                                                                                                                                                          |
| R6573 | 2023-09-28 | <ul style="list-style-type: none"> <li>Added features to improve reliability of firmware update process</li> <li>Added user-settable irradiance threshold for soiling analysis</li> <li>Added features for integration with Mars Soiling Sensor</li> <li>Modified Advanced Configuration screen to better guide user selections</li> <li>Added Help button on Support tab</li> <li>Fixed a bug in the export data progress bar</li> </ul> |
| R6501 | 2023-07-21 | <ul style="list-style-type: none"> <li>Added support for integrating Mars and RC22 with RDE300i</li> <li>Added support for up to 4 RDE300i Follower units</li> <li>Added Event Code to Help screen</li> <li>Requires RDE300i Firmware R6492 or higher</li> </ul>                                                                                                                                                                          |
| R6426 | 2023-04-13 | <ul style="list-style-type: none"> <li>Fixed bug on advanced settings configuration</li> </ul>                                                                                                                                                                                                                                                                                                                                            |
| R6422 | 2023-04-12 | <ul style="list-style-type: none"> <li>Supports IV parameter rapid update configuration</li> <li>Improved performance index normalization</li> <li>Automatically checks for software updates</li> <li>Requires RDE300i Firmware R6425 or higher</li> </ul>                                                                                                                                                                                |
| R6365 | 2023-04-05 | <ul style="list-style-type: none"> <li>Initial release</li> </ul>                                                                                                                                                                                                                                                                                                                                                                         |

## Installing the software:

- Download the 500092 installer .msi file from the link below
- Run the .msi installer

## RDE300i Firmware

### Overview

RDE300i Firmware (500108) is the software that runs directly on your RDE300i unit.

### Version History:

| Version Number | Release Date | Release Notes |
|----------------|--------------|---------------|
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| R7589 | 2026-07-31 | <ul style="list-style-type: none"> <li>Improved sweep interval management to enhance performance</li> <li>Improved robustness under unstable power supply conditions</li> <li>Improved system stability and implemented new communication recovery capabilities</li> <li>Improved normalization accuracy</li> <li>Enhanced visibility into IV curve diagnostics</li> <li>Expanded hardware compatibility support</li> <li>Improved overall system reliability</li> </ul> |
| R7545 | 2025-09-23 | <ul style="list-style-type: none"> <li>Improved Normalization</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                 |
| R7521 | 2025-08-20 | <ul style="list-style-type: none"> <li>Added Remote Normalization</li> <li>Added support for Cell Wash</li> </ul>                                                                                                                                                                                                                                                                                                                                                        |
| R7485 | 2025-05-28 | <ul style="list-style-type: none"> <li>Fixed a bug that reported Event Code 100 during Pmax mini sweep failures</li> <li>Improved communication recovery mechanisms</li> </ul>                                                                                                                                                                                                                                                                                           |
| R7412 | 2025-03-28 | <ul style="list-style-type: none"> <li>Not user-loadable</li> <li>Increased efficiency of Isc/Voc mini sweeps under high current conditions</li> <li>Reduced module disconnect time during high-voltage operations</li> <li>Lowered component stress over time, improving overall system lifespan</li> </ul>                                                                                                                                                             |
| R7215 | 2024-10-24 | <ul style="list-style-type: none"> <li>Improved flexibility in IV curve fitting for Curtailment use cases</li> <li>Fixed a bug resulting in occasional false spikes in Pmax on cloudy days</li> <li>Improved support for AUX devices</li> </ul>                                                                                                                                                                                                                          |
| R7074 | 2024-08-13 | <ul style="list-style-type: none"> <li>Fixed a bug that could leave device stuck with internal communication issue reporting Event Code 8</li> <li>Fixed a bug that could cause RTD temperature values to be stuck</li> <li>Added improved default Isc/Voc sweep operation. Eliminates 1-second clicking sound.</li> </ul>                                                                                                                                               |
| R6678 | 2024-02-14 | <ul style="list-style-type: none"> <li>Added support for new hardware revision with component substitution</li> <li>New units ship from Atonometrics with this version. There is no need to update any units in the field to this version.</li> </ul>                                                                                                                                                                                                                    |
| R6654 | 2024-01-12 | <ul style="list-style-type: none"> <li>Added rear-side irradiance uniformity filter for performance index</li> </ul>                                                                                                                                                                                                                                                                                                                                                     |

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|       |            | <ul style="list-style-type: none"> <li>Added event code for cool-down time between high power IV sweeps</li> <li>Fixed minor bugs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| R6611 | 2023-11-08 | <ul style="list-style-type: none"> <li>Fixed a bug that prevented reporting Isc or Irradiance at low Isc values</li> <li>Improved IV sweep capability for low Isc</li> <li>Improved IV update rate: parameters now update up to once per 1 second</li> <li>Added a feature to automatically attempt restart after internal communication error</li> <li>Improved sweep logic so Isc and Voc are always obtained, even at low currents</li> <li>Added event code 8 for internal communication error</li> <li>Improved consistency of Pmax/Isc reporting in different operating modes</li> <li>Fixed a bug that could cause missed Pmax mini sweeps at low current</li> <li>Fixed a bug that could cause some Follower registers to be reset incorrectly after a communication error</li> </ul> |
| R6569 | 2023-09-28 | <ul style="list-style-type: none"> <li>Added features for integrating Mars Soiling Sensor</li> <li>Added features to prevent need for external user restarts</li> <li>Improved communication with AUX devices</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| R6492 | 2023-07-21 | <ul style="list-style-type: none"> <li>Added support for integrating Mars and RC22 with RDE300i</li> <li>Added support for up to 4 RDE300i Follower units</li> <li>Fixed a bug that could cause missed communication attempts</li> <li>Improved filtering of measurement results</li> <li>Requires RDE300i Configuration Manager R6501 or higher</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| R6427 | 2023-04-13 | <ul style="list-style-type: none"> <li>Fixed bug affecting RTD temperature sensor startup</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| R6425 | 2023-04-12 | <ul style="list-style-type: none"> <li>IV parameter rapid update</li> <li>Improved performance index normalization</li> <li>Requires RDE300i Configuration Manager R6422 or higher</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| R6368 | 2023-04-01 | <ul style="list-style-type: none"> <li>Initial release</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Installing the software:

- Download the 500108 (.RDE300i) file from the link below
- Follow firmware update instructions here: [Updating RDE300i Firmware](#)

## Attachments (2)



500092\_R7546 RDE300i Configuration Manager Installer.msi  
8.34 MB



500108\_R7589\_Firmware.RDE300i  
77.1 KB