TÜV Rheinland: Extended testing standard for the photovoltaic industry



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Quality assurance for solar simulators / Important aspects added / Additional requirements beyond the 2020 International Electrotechnical Commission (IEC) standard / <u>www.tuv.com/solar</u>

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TÜV Rheinland offers its own test standard for solar simulators for the photovoltaic industry. Manufacturers of turnkey solar simulator systems will thus receive an extended service to confirm their product quality. This involves the highly accurate performance measurement of PV modules or solar cells as well as the user- and maintenance-friendliness of their systems.

The newly developed TÜV Rheinland standard is based on the standard of the International Electrotechnical Commission (IEC) 60904-9:2020, which has been comprehensively revised in 2020. However, the new standard goes far beyond the international standards by additionally taking into account important aspects of quality assurance. Among other things, the experts of TÜV Rheinland scrutinize the variation in technical performance between different systems of the same type and analyze the possible effects of lamp changes. In addition, special effects that may occur during the specified service life time of the lamps are closely monitored by the experts. The neutrality of environmental influences at the respective installation site is also a component of this extended test, as is the existence of a calibration management system and an appropriate calibration service. The extended scope of the certification also includes a review of technical documentation, training measures, troubleshooting instructions, and service and maintenance instructions.

Certification for solar simulator manufacturers

In addition to classification tests for module manufacturers, experts or testing and research institutes, the testing service provider now also offers certification for solar simulator manufacturers and their products. The requirements for this certification were recently changed to the new TÜV Rheinland standard "2 PfG 2788/12.21" ("Classification of turn-key solar simulator systems for PV module and solar cell measurements"). The first sun simulator system certified according to the new TÜV Rheinland standard 2 PfG 2788/12.21 is the MBJ Sun Simulator 4.0, including the WIDE/ECO/MAX variants, from Ahrensburg-based manufacturer MBJ Solutions GmbH.



For more information, visit

https://www.certipedia.com/quality_marks/1111257143?locale=en at TÜV Rheinland.

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