



Deliverable Report

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Executive Summary

The Deliverable Report D4.2 Part A “Serial produced components: small prototype module (BIPV)” summarizes the activities during the part production of the small prototype module (BIPV) support structure. The implemented design of the modular hybrid support structure of the small prototype PV-module was developed, realized and successfully validated at the beginning of the SuMMiT project (see Deliverables D1.5 Part A und D1.6 Part A). Taking into account the parts’ design (e.g. part size or geometric complexity) in combination with the target of a cost-efficient manufacturing of the polymer components, injection molding was determined to be the technology of choice.

After the successful assembly of the first prototype-modules using the polymer parts for the support structure which were produced during the first pilot run (D1.6 Part A), the production of first functional demo BIPV-modules for several purposes (Testing, Dissemination, ...) was planned. For the injection molding of the polymer parts required in this regard the same material and therefor the same process parameters were used as in the pilot run. Due to this preliminary work, it was possible to produce over 500 parts under near serial conditions without any problems.

Focusing on the development and implementation of the 120 cells PV-module approach, only one serial run was implemented during the further course of the project.

The parts have been used for the production of BIPV prototype modules that have been used for demonstration (Intersolar 2015 amongst others) as well as testing at KIWA with good results.

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http://cordis.europa.eu/fp7/cooperation/home_en.html

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