



# Test report

No. 1821\_FRM

**Test object:** **Mounting system Q.FLAT-G5 (reduced size model),**  
manufacturer Hanwha Q CELL  
**incl. Saddle Clamp with enlarged contact surface (with self-locking nut M10) (Part No. S07 911) with aluminium round wire (Ø 10 mm)\*, 2x Bridging Braid short design (Part No. 377 015), 2x Bridging Braid long design (Part No. 377 115) and 2x UNI Saddle Clamp (Part No. 365 250) with aluminium round wire (Ø 8 mm),** manufacturer DEHN + SÖHNE.

**Applicant:** *Hanwha Q CELL GmbH*  
*Sonnenallee 17 - 21*  
*06766 Bitterfeld-Wolfen*  
*Germany*

**Type of testing:** Evaluation of the photovoltaic system as part of a natural down-conductor of a lightning protection system, following the principles of IEC 62305-3 Edition 2.0 2010-12, chapter 5.3.5.  
Inclusive inspection of the lightning impulse current carrying capability of the test classification H (100 kA), following the principles of IEC 62561-1 Edition 2.0 2017-03, chapter 6.3.1 and chapter 6.4.

**Test result:** → **The test of the lightning current capability of the mounting system Q.FLAT-G5 for the test classification H (100 kA) passed the criteria of IEC 62561-1. The test samples show no visible damages.**  
→ **According to the criteria of IEC 62305-3 the mounting system Q.FLAT-G5 can be used as part of a natural down-conductor of a lightning protection system.**

**Contents:** 40 pages test report including 41 figures and 9 oscillograms.

Neumarkt, 14th June 2018

revision: 0

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\* Remark: The aluminium round wire (Ø 10 mm) represent the external air-termination rod in the final application, see also remarks for the installation on page 3 and 19