



**Crystalline Silicon
Terrestrial
Photovoltaic Modules**



Picture of Product



www.VDEinfo.com
ID. 40050642

VDE Testing and
Certification
Institute

Merianstr. 28
D-63069 Offenbach

Tel. +49 69 8306-0
Fax +49 69 8306-555
www.vde.com

Evaluation of safety and reliability

Low Voltage Directive	2014/35/EU	<input checked="" type="checkbox"/>
Electrical Safety	IEC 61730-1:2016, EN IEC 61730-1:2018 + AC:2018, IEC 61730-2:2016, EN IEC 61730-2:2018 + AC:2018	<input checked="" type="checkbox"/>
Reliability	IEC 61215-1:2016, EN 61215-1:2016 IEC 61215-1-1:2016, EN 61215-1-1:2016 IEC 61215-2:2016 EN 61215-2:2017+AC:2017+AC:2018	<input checked="" type="checkbox"/>
Factory Surveillance	VDE PM 434E:2019-04	<input checked="" type="checkbox"/>
Enhanced Reliability and Factory Surveillance	VDE Testing Specification VDE-QT-PV-001:2019-01	<input checked="" type="checkbox"/>

Specifications

Manufacturer	Hanwha Q CELLS GmbH Sonnallee 17-21, 06766 Bitterfeld-Wolfen, Germany	
Trademark		
Factory Locations	#30018653, #30023330, #300023399, #30024481, #30025062	
Model / Type (Construction I))	Q.PLUS DUO-GY XXX Q.PLUS DUO BLK-GY XXX Q.PLUS DUO BFR-GY.Y XXX Q.PEAK DUO BLK-GY XXX Q.PEAK DUO BLK-GY.Y XXX (XXX replaces the power at STC)	Q.PLUS DUO BFR-GY XXX Q.PLUS DUO-GY.Y XXX Q.PEAK DUO-GY XXX Q.PEAK DUO-GY.Y XXX

Accessories and technical features

Power at STC	270 – 335 W
Maximum System Voltage	1000 V
Class	II
Application Class	A
Fire Rating	C
Maximum Reverse Current	20 A
Mechanical Load	Qualified for heavy loads of snow and ice (Test load 5400 Pa)

Evaluation of quality characteristics

high reliability	<ul style="list-style-type: none"> Testing with increased number of testing samples <input checked="" type="checkbox"/> Testing with enhanced testing time and number of cycles <input checked="" type="checkbox"/>
low degradation	<ul style="list-style-type: none"> Tightened pass/fail- criteria <input checked="" type="checkbox"/> Maximum permitted degradation of the power of 5% over the enhanced test sequence <input checked="" type="checkbox"/>
optimized durability	<ul style="list-style-type: none"> Additionally dynamic mechanical load test <input checked="" type="checkbox"/> Robustness of terminations test with increased force <input checked="" type="checkbox"/>
continuous line monitoring	<ul style="list-style-type: none"> Tightened and upgraded requirements within the 100% routine test <input checked="" type="checkbox"/> Quarterly testing on samples collected from the running lines of each factory <input checked="" type="checkbox"/>