



**Bureau Veritas  
Consumer Products Services  
Germany GmbH**

Businesspark A96  
86842 Türkheim  
Germany  
+ 49 (0) 40 740 41 – 0  
cps-tuerkheim@de.bureauveritas.com

Certification body of BV CPS GmbH  
Accredited according to EN 45011 -  
ISO / IEC Guide 65

## Certificate of compliance

**Applicant:** Delta Electronics, Inc.  
39, Section 2, Huandong Road, Shanhua Township, 74144  
Tainan Country,  
Taiwan

**Product:** Grid-tied photovoltaic inverter  
**Model:** RPI-M20A

### Use in accordance with regulations:

Automatic disconnection device with three-phase mains surveillance in accordance with IEC 61727:2004 and IEC62116:2008 for photovoltaic systems with a three-phase parallel coupling via an inverter in the public mains supply. The automatic disconnection device is an integral part of the aforementioned inverters.

### Applied rules and standards:

**IEC 61727:2004**

Photovoltaic (PV) systems – Characteristics of the utility interface

**IEC 62116:2008**

Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters

**IEEE 1547:2003 and 1547.1:2005**

IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems

**AS 4777.2:2005 and AS 4777.3:2005**

Grid connection of energy systems via inverters – inverter requirements and grid protection requirements

*The following deviations for Thailand were applied according the grid-connected inverter regulations of the Provincial Electricity Authority (PEA):*

*under voltage limit (level 1): 198,0V  
under voltage limit (level 2): 110,0V  
over voltage limit (level 1): 242,0V  
overvoltage limit (level 2): 264,0V  
lower frequency limit: 48,0Hz  
upper frequency limit: 51,0Hz  
loss of main detection limit: 350ms*

*Metropolitan Electricity Authority (MEA):*

*under voltage limit (level 1): 200,0V  
under voltage limit (level 2): 115,0V  
over voltage limit (level 1): 240,0V  
overvoltage limit (level 2): 310,0V  
lower frequency limit: 49,0Hz  
upper frequency limit: 51,0Hz  
loss of main detection limit: 300ms*

At the time of issue of this certificate the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

**Report number:** PV130826C06-IEC61727

**Certificate number:** U13-0687

**Date of issue:** 2013-09-25

**Valid until:**

2016-09-24

### Certification body

Dieter Zitzmann



Deutsche  
Akkreditierungsstelle  
D-ZF-12024-01-01



QUALITY



HEALTH



SAFETY



ENVIRONMENT



SOCIAL  
ACCOUNTABILITY