






**BUREAU  
VERITAS**

# TEST REPORT

## IEC 61683

**Photovoltaic systems – Power conditioners – Procedure for  
measuring efficiency**

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| <b>Report reference number .....</b>   | <b>PV140717C01</b>  |
| <b>Date of issue .....</b>             | 2014-07-29  |
| <b>Total number of pages .....</b>     | 21  |
| <b>Testing laboratory name .....</b>   | <b>Bureau Veritas Consumer<br/>Products Services (H.K.) Ltd.,<br/>Taoyuan Branch</b>  |
| <b>Address .....</b>                   | No. 47, 14th Ling, Chia Pau<br>Vil., Lin Kou Dist., New Taipei<br>City, Taiwan  |
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| <b>Applicant's name .....</b>          | <b>Delta Electronics, Inc.</b>  |
| <b>Address .....</b>                   | 39, Section 2, Huandong Road, Shanhua Township, Tainan Country,<br>74144, Taiwan  |
| <b>Test specification</b>              |   |
| <b>Standard.....</b>                   | IEC 61683:1999; EN 61683:2000; DIN EN 61683:2000  |
| <b>Certificate.....</b>                | <b>Certificate of compliance</b>  |
| <b>Test report form number. ....</b>   | IEC61683  |
| <b>Master TRF .....</b>                | Bureau Veritas Consumer Products Services Germany GmbH  |
| <b>Test item description.....</b>      | <b>Grid-tied photovoltaic inverter</b>  |
| <b>Trademark.....</b>                  |   |
| <b>Model / Type .....</b>              | RPI M50A_xxx*<br>* Remark: In the inverter name 'x' can be any number 0 to 9 or letter A<br>to Z or blank   |
| <b>Model Names .....</b>               | RPI M50A_xxx*   |
| <b>Ratings .....</b>                   | See below   |
| <b>MPP DC voltage range [V].....</b>   | 520-800Vdc  |
| <b>Input DC voltage range [V].....</b> | 200-1000Vdc, 1000Vdc max.   |
| <b>Input DC current [A] .....</b>      | 50A x 2 strings   |
| <b>Output AC voltage [V] .....</b>     | 230/400Vac, 3P4W, 50Hz  |
| <b>Output AC current [A].....</b>      | 76A max.  |
| <b>Output power [VA].....</b>          | 50,0 kVA  |

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| <b>Testing Location.....:</b>                     | <b>Delta Electronics Inc.</b>   |   |  |
| <b>Address .....</b>                              | 39, Section 2, Huandong Road,Shanhua Township, Tainan City<br>74144, Taiwan   |   |  |
| <b>Tested by<br/>(name and signature) .....</b>   | Dino Kao  |   |  |
| <b>Approved by<br/>(name and signature) .....</b> | Edward Chiueh   |  |  |
| <b>Manufacturer's name .....</b>                  | <b>Delta Electronics (Jiang Su), Ltd.</b>   |   |  |
| <b>Factory address.....</b>                       | No. 1688, Jiangxing East Rd., Wujiang Economic Development Zone,<br>Wujiang City, Jiang Su Province, 215200, P.R. China |   |  |

| Document History           |                    |                                |          |
|----------------------------|--------------------|--------------------------------|----------|
| Date                       | Internal reference | Modification / Change / Status | Revision |
| 2014-07-30                 | Dino Kao           | Initial report was written     | 0        |
| Supplementary information: |                    |                                |          |