



FM Approvals
 1151 Boston Providence Turnpike
 P.O. Box 9102 Norwood, MA 02062 USA
 T: 781 762 4300 F: 781-762-9375 www.fmapprovals.com

Member of the FM Global Group

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

OGRE Series Solar Modules.

NI / I / 2 / ABCD / T5Ta = -40°C to +90°C ; IP65

| OGRE Series Solar Modules | | | | |
|----------------------------------|------------------|------------------------|-------------------------|--------------------------|
| Model Description | Max Power | Nominal Voltage | Open Circuit Voc | Short Circuit Isc |
| OGRE P010-J12 | 10 Watts | 12 V | 21.7 Voc | 0.62 Isc |
| OGRE P020-J12 | 20 Watts | 12 V | 21.7 Voc | 1.21 Isc |
| OGRE P030-J12 | 30 Watts | 12 V | 21.7 Voc | 1.85 Isc |
| OGRE P040-J12 | 40 Watts | 12 V | 21.7 Voc | 2.47 Isc |
| OGRE B060-J12 | 60 Watts | 12 V | 20.3 Voc | 3.99 Isc |
| OGRE B090-J12 | 90 Watts | 12 V | 20.4 Voc | 5.92 Isc |
| OGRE B110-J12 | 110 Watts | 12 V | 19.4 Voc | 7.66 Isc |
| OGRE B110-J24 | 110 Watts | 24 V | 38.7 Voc | 3.83 Isc |
| OGRE B130-J12 | 130 Watts | 12 V | 24.1 Voc | 7.11 Isc |
| OGRE B130-J24 | 130 Watts | 24 V | 48.2 Voc | 3.56 Isc |

Special Conditions of Use:

1) In Class I, Division 2 installations, the subject equipment shall be mounted within a tool-secured enclosure which is capable of accepting one or more of the Class I, Division 2 wiring methods specified in the National Electrical Code (ANSI/NFPA 70).

Equipment Ratings:

Electrical apparatus for use in Class I, Division 2, Groups A, B, C and D indoor/outdoor Type IP65 hazardous locations. Temperature Classification of T5 @ Ta = -40°C to +90°C.



Member of the FM Global Group

FM Approved for:

**Off Grid Renewable Energy (OGRE)
Oklahoma City, OK 73116**

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

| | |
|------------|------|
| Class 3600 | 1998 |
| Class 3611 | 2004 |
| Class 3810 | 2005 |
| ANSI/IEC | 2004 |


Original Project ID: 3042410

Approval Granted: April 4, 2011

Subsequent Revision Reports / Date Approval Amended

| Report Number | Date | Report Number | Date |
|---------------|------|---------------|------|
|---------------|------|---------------|------|

FM Approvals LLC



Timothy Adam
Technical Team Manager

April 4th, 2011
Date