

Test Report No: SMR(K)/EMCD-TR/21-20/022/013B

EMC TEST REPORT FOR PV MODULE TEMPERATURE SENSOR WITH ACCESSORIES

Customer:

**M/s. M. B. CONTROL & SYSTEMS PVT. LTD.
31/1, AHIRIPUKUR ROAD, KOLKATA – 700019, WB,
INDIA**

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SAMEER KOLKATA CENTRE
[SOCIETY FOR APPLIED MICROWAVE ELECTRONICS ENGINEERING AND RESEARCH]

**R & D LABORATORY OF
MINISTRY OF ELECTRONICS & INFORMATION TECHNOLOGY [MeitY]
GOVT. OF INDIA
PLOT – L2, BLOCK – GP, SECTOR – V, SALT LAKE ELECTRONICS COMPLEX,
KOLKATA – 700 091, INDIA**

APRIL, 2022

ULR-TC404522000000001F

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SAMEER KOLKATA CENTRE, KOLKATA – 700 091

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Test Report Particulars

Certificate No. TC-4045

- 01 Equipment under Test : PV Module Temperature Sensor with Accessories
- 02 Number of test sample : One
- 03 Model Number of EUT : MBMet-802
- 04 Serial number of EUT : MB20238
- 05 Brand : Nil
- 06 Manufacturer : M/s. M. B. CONTROL & SYSTEMS PVT. LTD
- 07 Customer : M/s. M. B. CONTROL & SYSTEMS PVT. LTD.
31/1, AHIRIPUKUR ROAD, KOLKATA – 700019, WB, INDIA
- 08 Type of test requested : Power Frequency Magnetic Field Immunity Test
- 09 Test Specifications : IEC 61000-4-8, Edition 2.0 2009-09
- 10 Sample Received on : 28th March, 2022
- 11 EUT condition : Functional
- 12 Tested on : 28th March, 2022
- 13 Test Venue : SAMEER KOLKATA CENTRE
- 14 Test Witnessed by : Mr. SHAMIBRATA BHOWAL(QUALITY CONTROL ENGINEER)
- 15 Test Request Number : SMR(K)/EMCD-TRQ /21-22/023

The **PV MODULE TEMPERATURE SENSOR WITH ACCESSORIES** has been tested for the parameters reflected in the subsequent pages and that the data reported in this report is valid only for the test sample mentioned above and under the stated condition of measurement. Particulars of manufacturer / supplier, given in this report, are based on the information given by the customer, along with the test request. **SAMEER KOLKATA CENTRE** does not bear any responsibility for the correctness of that information for the above mentioned equipment under test.

TEST REPORT PREPARED BY

REVIEWED BY

APPROVED BY

OFFICE SEAL &
ISSUED DATE

Prakash
J. PRAKASH
IN-CHARGE TECH. SUPPORT

Satyajit Chakrabarti
SATYAJIT. CHAKRABARTI
QM

Dipankar Dan
DIPANKAR.DAN
TM

SAMEER KOLKATA CENTRE
S

26 APR 2022

ULR-TC404522000000001F

GOVT. OF INDIA

Equipment under test : PV MODULE TEMPERATURE SENSOR WITH ACCESSORIES
 Model No. : MBMet-802
 Sl. No. : MB20238
 Customer : M. B. CONTROL & SYSTEMS PVT. LTD

EMC TEST REPORT FOR PV MODULE TEMPERATURE SENSOR WITH ACCESSORIES

1.0 POWER FREQUENCY MAGNETIC FIELD IMMUNITY TEST

1.1 APPLICABLE STANDARD: IEC 61000-4-8 Edition 2.0 2009-09

1.2 TEST SPECIFICATIONS:

Test levels : 5
 Magnetic field strength : 100A/m (continuous field)

1.3 TEST INSTRUMENT USED:

EQUIPMENT	MAKE	MODEL NO.	SERIAL NO.	LAST CAL DATE
Helmholtz Coil	SAMEER KOLKATA CENTRE	HLMTZ1103	HLMC060	03.02.2022*
Auto Transformer	DIMMERSTAT	28D – 1P	1003/03/226/9	03.02.2022*
True RMS Multimeter	Fluke	289	38060015	25.08.2021
AC/DC current clamp	Fluke	i1010	47910438	25.08.2021

* Internal Performance Verification

1.4 ENVIRONMENTAL CONDITION:

Temperature : 30.1°C
 Humidity : 59.7%

1.5 TEST PROCEDURE :

As per SMR(K)/OP/08; Issue 02, dated 4th June, 2012; Revision 01, dated 17th June, 2016

EUT was configured for connection to single-phase AC mains. AC power source (Auto Transformer) and EUT were switched "ON" and left "ON" for 10 minutes for stabilization. Current amplitude in the coil was increased to generate required level of the H-Field as mentioned in level- 5 of the standard.

1.6 EVALUATION OF TEST RESULTS:

During and after test run, no impact on the normal functioning of the EUT was noticed. Normal performance within the limits specified by the manufacturer, requestor or purchaser.

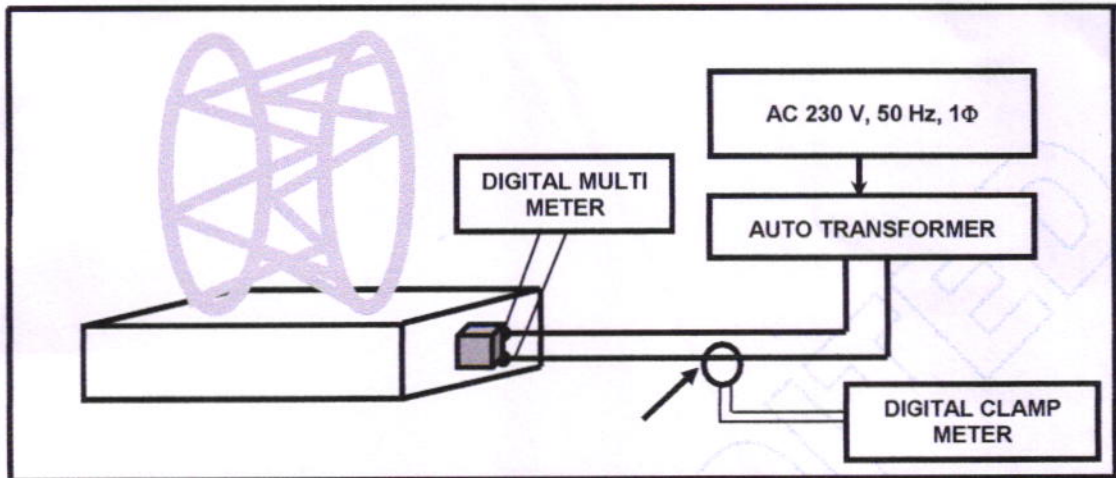


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1.7 Calibration Set-up Block Diagram:



1.8 Test set-up Photograph for Power Frequency Magnetic Field Immunity Test as per IEC

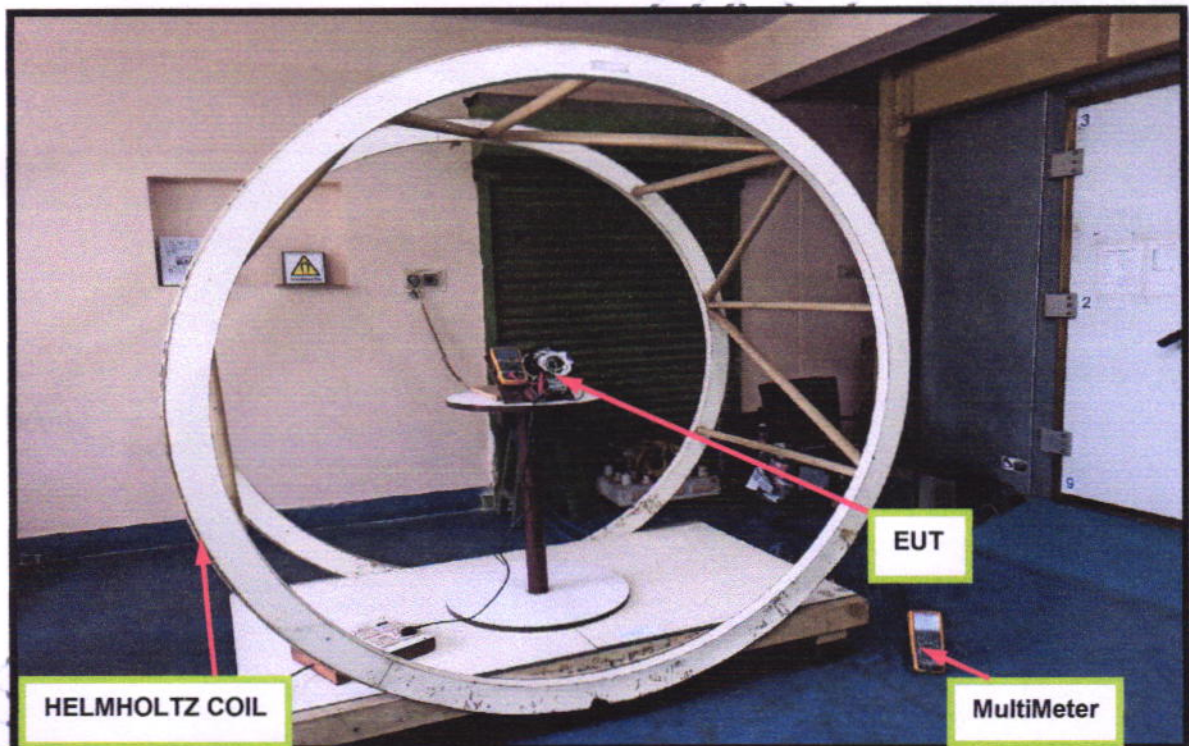


Fig 1: Photograph of the power frequency magnetic field immunity test set-up for PV Module Temperature Sensor with Accessories

TEST CONDUCTED BY:

J. PRAKASH
 IN-CHARGE TECH. SUPPORT

K. J. JOSHI
 KUNTAL JOSHI
 PROJECT ASSISTANT-C

N.K. SADHU
 EMI/EMC ENGINEER

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