EMC TEST REPORT

Project No.: *L11-20149*

Equipment Under Test: *Remote Terminal Unit (RTU)*

Model/Type : *SGR-2000*
S/N : *SSP01478*
Rating : *12-24 VDC; 0.2 W*

Manufactured By: *Sazgar Sanat Payam Co.*

Applicant: *Sazgar Sanat Payam Co.*

Tested According To: *IEC 60870-2-1:1995*
Issue Date: *15-Jan-17*

No. of pages: *8*

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1. GENERAL INFORMATION

1.1. Product Information

Equipment under test	:	RTU
Manufacturer	:	Sazgar Sanat Payam Co.
Model/Type	:	SGR-2000
S/N	:	SSP01478
Rating	:	12-24 VDC; 0.2 W

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2. SUMMARY

This section presents an overview of standard and results. Refer to the next section for details of measured Test results and applied test levels.

2.1. Overview of Results

Immunity Tests	Basic Standards	Results
Burst	IEC 61000-4-4 :2012	PASS

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Test results pertain to the tested sample only.
Not Valid Without Lab Stamp.

3. IMMUNITY TEST RESULTS

3.1. Electrical Fast Transient Burst Immunity Test

This test simulates quick transient noise interferences mostly generated switching inductive loads. Significant for this interference's is a very short rise time of the single pulses and the high repetition rate within burst packet.

3.1.1. Test data

Location	:	EPIL
Date	:	15-Jan-2017
Engineer of EPIL	:	Mr. Ghaffari

3.1.2. Ambient conditions

Ambient Temperature	:	24.4 °C
Relative Humidity	:	42.8 %
Atmospheric Pressure	:	86.5 kPa

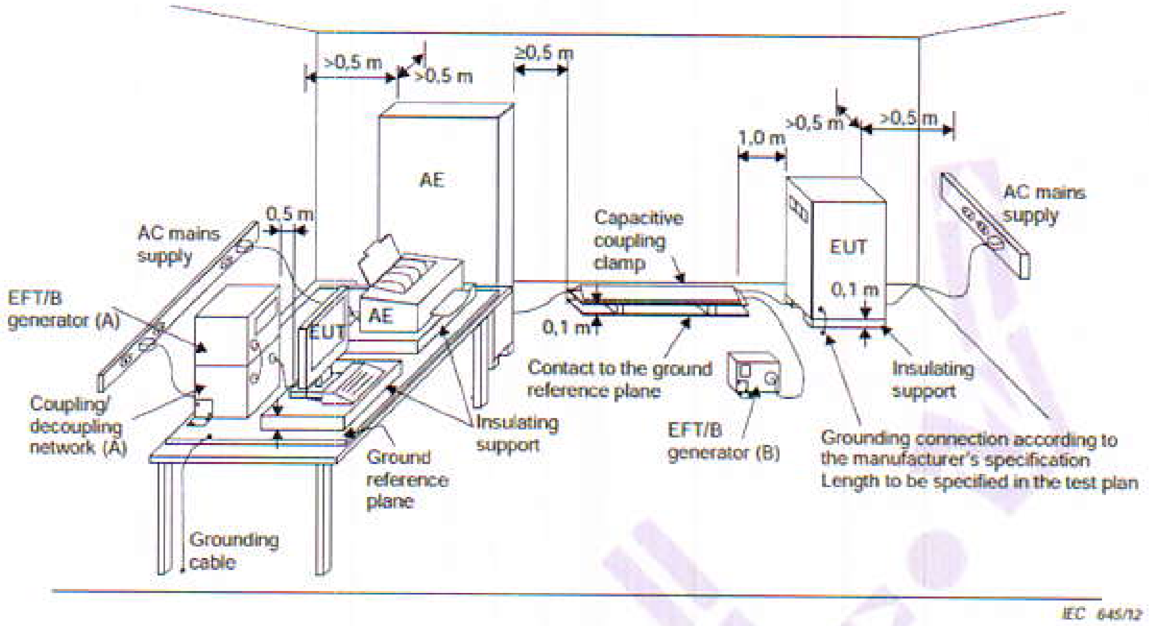
3.1.3. Instrument used for test

Equipment	Manufacturer	Model	S/N
Burst Generator	Schloeder	SFT 400	403315

3.1.4. Procedure of test

Performed test:

Basic standard	IEC 61000-4-4
Peak Voltage	±2 kV
Coupling Method	Direct
Tested Ports	Power Supply
Repetition Rate	5 kHz
Coupling Lines	+; -; PE
Test Time	60 seconds



(A) location for supply line coupling

(B) location for signal lines coupling

Figure 1: Example of a test setup for laboratory type test

3.1.5. Test result

Coupling Line	Voltage	Repetition frequency	Coupling method	Complied with Criteria	Acceptance Criteria	Result
+	±2 kV	5 kHz	Direct	A	B	Pass
-	±2 kV	5 kHz	Direct	A	B	Pass
+,-	±2 kV	5 kHz	Direct	A	B	Pass
PE	±2 kV	5 kHz	Direct	A	B	Pass
+,PE	±2 kV	5 kHz	Direct	A	B	Pass
-,PE	±2 kV	5 kHz	Direct	A	B	Pass
+,-,PE	±2 kV	5 kHz	Direct	A	B	Pass

Figure 2: Test set-up

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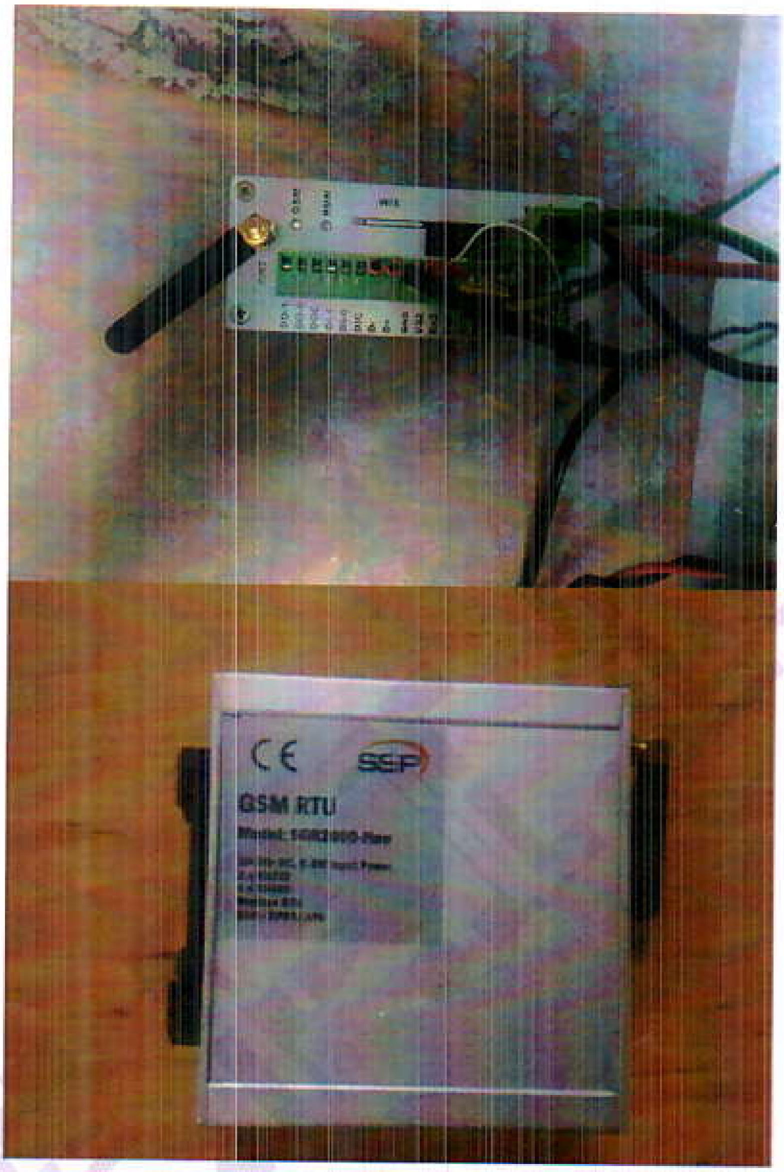

Figure 3: EUT