

Certificate of Calibration

Manufacturer: **Radian Research, Inc.**
Instrument Model: **RD-33-333 Dytronic Portable Standard**
Serial Number: **300273**
Firmware Revision: **07.34.06**
Error Specification: **.01% worst case**



**Quality Management System
ISO 9001 Certified**

Customer Name: **Enercom S.A.**
Address: **Balboa, Calle Akee #1511-B APDO.321
Balboa-Ancon Panama**

P.O.Number: **Advanced Pay**

Environmental Conditions
Temperature: **23°C +/- 2°C**
Humidity: **between 30% and 60%**

CE Number:
RMA / Certificate Number: **35014**

Calibration Date: **12-Oct-18**

Based on the recommended calibration interval, the next calibration is due on: **12-Oct-19**

Physical Condition: Undamaged

Radian Research's As-Found Test Results showed this Instrument to be:

[] New [X] In Tolerance [] Out of Tolerance [] Inoperative [] Limited Calibration
For Out of Tolerance conditions, As-Found Data Reports are furnished.

Radian Research Inc. certifies the instrument listed above meets or exceeds all published specifications and was calibrated in compliance with ANSI/NCSL Z540-1 using applicable Radian Research procedures which meet the requirements of ISO 9001:2015.

This instrument was calibrated by a Radian Research RS-703A Syntron Automated Calibration System which is traceable to the National Institute of Standards and Technology (NIST) and / or other National Metrology Institute (NMI). The RS-703A Calibration System is traceable within the limitations of NIST's services, by accuracies derived from accepted values of natural physical constants, or accepted ratio type calibration techniques. The RS-703A Calibration System is cross checked and calibrated on a schedule which is adjusted to maintain required accuracies and traceability.

Procedure used for Calibration: **9912987**

Software used for Calibration: **RS-703A Control Program Rel.04.30.03 Test Release Apr 6**

RS-703 serial number: **703125, 703140, 703192**

Applicable Traceability & Report Numbers for References used by Radian's Metrology Lab:

Watt-hour, VA-hour, VAR-hour, Q-hour, Amp-hour,

Volt-hour, Volt-Squared hour, AC Volt

Master Reference Bank consisting of (3) RD-22-RTS

Serial Numbers: **200717, 200718, 200719, Calibration Due Date: 28-Dec-2018**

Traceable to (3) RD-22-RTS SN's **202098, 202099, 202100** calibrated by NIST

NIST Calibration Report Number: **684/288261-16**

Time Base (Frequency)

Arbiter Systems Model 1083B Satellite-Controlled Frequency Standard s/n B1057. GPS controlled system with an uncertainty of 0.000002ppm. No calibration required.

DC Volts

Fluke Model 732B DC Volt Standard s/n 7703004 with an uncertainty of $\pm .1$ ppm.

Fluke Certificate Number **15D5460**; Calibration Due Date: **24-May-2019**.

Resistance

Guilcline Standard Resistor Model 9330/10K s/n 62623, 62624 with an Expanded Uncertainty of $\pm .320$ ppm.

Test Certificate **GCS16825, GCS16826**. Calibration Due Dates: **4-Apr-2019**.

Other

Hewlett Packard 8 Digit Multi-Meter Model 3458A s/n 2823A02816. Keysight Technologies

Test Certificate Number **1-9621454509-1**: Calibration Due Date **07-Feb-2019**.

Metrology Laboratory Technician Signature

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