

Certificate of Calibration

Manufacturer: **Radian Research, Inc.**
Instrument Model: **RD-33-333 Dytronic Portable Standard**
Serial Number: **300732**
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: **35015**
Calibration Date: **14-Oct-18**

Based on the recommended calibration interval, the next calibration is due on: **14-Oct-19**

Physical Condition: Undamaged

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

New 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/NC SL 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: **Radian Source Control Program Rel.04.30.19 Test Release Mar 31**
RS-703 serial number: **703198, 703199, 703201**

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

Guilidine 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

LAB
88

*This report shall not be reproduced, except
in full, without prior written approval of the
Calibration Facility*