

## New Product Announcement

### Introducing the *RA Series* Frequency Response / Impedance Analyzers

#### New Features:

- ❖ 1U High Form Factor
- ❖ Bench-top or Rack Mountable
- ❖ Front Panel Manual Amplitude Adjustment Control



Model RA-40

**Core Technology Group, Inc.**, a Test and Measurement Design and Manufacturing company, brings you the RA Series, Swept Frequency Network/Impedance Analyzers that give you the power to make high quality frequency domain and impedance measurements on your electronic, mechanical, electro-chemical, micro and nanotech systems, at a very low cost. Simple and powerful Windows based Virtual Front Panel software, along with a small and portable form factor, make test setup and data acquisition quick and easy with any one of six models. Frequency response ranges span from 0.1 Hz, through 40 MHz, and prices start at \$4,990.00 US.



## RA & SA Series Specification Summary

### System

Dimensions	-----	1.75"H x 13.5"W x 11.625"L
Weight	-----	6 lbs.
Computer Interface (included)	-----	Standard USB

### Power Source

External (Included)	-----	+ 12VDC
Power Consumption	-----	9.7 Watts

### Source Characteristics

#### Frequency Characteristics

Range	-----	10 Hz to 1 MHz
Model: RA / SA-01	-----	1 Hz to 10 MHz
RA / SA-10	-----	0.1 Hz to 40 MHz
RA / SA-40	-----	0.0293Hz

Resolution -----

#### Output Characteristics

Power Range (into 50 load)	-----	-36dBm(10mv <sub>pp</sub> ) to +4 dBm(1V <sub>pp</sub> )
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Output Adjustment Range (RA Series)	-----	-36dBm to VFP Indicated full scale
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Flatness	-----	+/- 0.5 db
0.1 Hz to 10 MHz	-----	+/- 1.5 db
10 MHz to 40 MHz	-----	0.2 db

Resolution ----- 50 Ohms

Output Impedance ----- 40 mA

Current Limit (output shorted) ----- BNC

Connector -----

### Magnitude Characteristics

Ratio Accuracy (typically for B/A) <sup>1</sup>		< +/- 0.05 db
Input signal level = -10 dBm at channels A and B, IF Bandwidth = 5Hz		

### Phase Characteristics

Ratio Accuracy (typically for B/A) <sup>1</sup>		< +/- 0.6°
Input signal level = -10 dBm at channels A and B, IF Bandwidth = 5Hz		

### Receiver

Input Coupling	-----	AC
Dynamic Range	-----	96 db
Input Signal Level Maximum <sup>3</sup>	-----	+4 dBm (1V <sub>pp</sub> )
Input Impedance	-----	1Megahom    22 pf

<sup>1</sup> Ratio measurements cancel deviations in source

<sup>2</sup> For more detailed spec., just contact us.

<sup>3</sup> x10 probe increases maximum input signal to 10 V<sub>pp</sub>