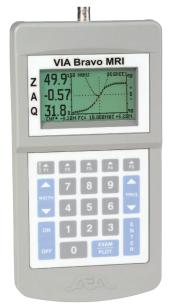


MRI Analyzers

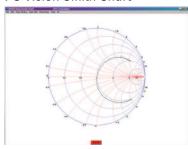
US Patent 7,030,627 B1

VIA Bravo MRI™ Analyzers For Testing Transmit and Receive Coils 0.1-3.0T





PC Vision Smith Chart



The VIA Bravo MRI is a Vector Impedance Analyzer that accurately measures impedances from 2 to 2000 Ohms, resistance, phase angle, X, Q, return loss, and SWR. The Bravo MRI can simultaneously provide graphical display for any two measurement parameters. The frequency sweep is plotted in the X axis and independent left and right Y axis scales are user selectable. The Bravo's portability and ability to function in close proximity to magnetic fields make it the ideal test instrument for installing and servicing MRI systems. Additionally, our Bravo products come with Bravo PC Vision™ software. This software permits remote control operation of the Bravo MRI to upload test results to a PC or laptop, view the VIA or Smith Charts in full color, store and print complete analyzer documentation. While the Bravo's LCD can support displaying two parameters, PC Vision can display one or all the testing parameters at once. The Bravo MRI will save time, reduce capital expenditures, and reduce costs typically associated with the installation and servicing of MRI Systems.

Features

· Frequency range:

• Tuning Resolution:

• Measurement Speed:

• Freq. Display Width:

• Impedance Range:

• Impedance Scales:

• Phase Angle Scales:

· Harmonic & Spurious:

Output Power:

• Power Requirements:

Input Connectors:

· Display:

Non Volatile Memory:

• Dimensions:

Weight:

100KHz to 70MHz MRI 100KHz to 200MHz MRI II

< 0.02% of Center Frequency

~ 1 sweeps/second

0 -12.8MHz/80 data pts/Large Readout Mode

0 - 16MHz/100 data pts/Small Readout Mode

0 to 2000 Ohms

0 to 100 Ohms Minimum

0 to 2000 Ohms Maximum

± 15 to ± 180 Degrees

>30 dB below fundamental

~ -15 dBm @ 50 Ohms

13.8 to 18 VDC @ 400mA Min.

BNC for Bravo MRI

N Type for all other models

64 x 128 pixels backlit LCD

Slots 1-16 Instrument presets

Slots 17-24 presets & data

8.5x4.3x2.25" (215x110x57mm)

20 oz (640g) without batteries

For 0.1 to 20.0T MRI or NMR Systems see VIA Echo MRI on reverse

Models

VIA Bravo MRI...... 6015-5000 VIA Bravo MRI II...... 6015-5250

All Models Include:

PC Vision software Serial Cable, 25ft (7.6m) AC Adapter, 90-240VAC 50-60Hz Padded Belt Case **Calibration Terminators**

Benefits

- Provides rapid coil performance analysis
- Improves MRI reliability
- Improves MRI image quality
- Reduces service wait time
- Reduces MRI out of service time
- Operates in magnetic environment
- Can be operated in remote control from a PC or laptop
- Document coil performance and tuning
- Maintain servicing records for coils
- Optional dual-port models (S11 & S21) for coil-to-coil loss/separation

Optional Accessories

Kit Carrying Case, Soft Part# 6015-1002

Large reinforced soft sided carrying case with product wells in closed foam insert and shoulder strap

Kit Carrying Case, Hard Part# 6015-1003

Large hard-shell carrying case with product wells in closed cell foam block. Case has gasket seal with handle, padlock holes and pressure vent.



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6015-1002



6015-1003

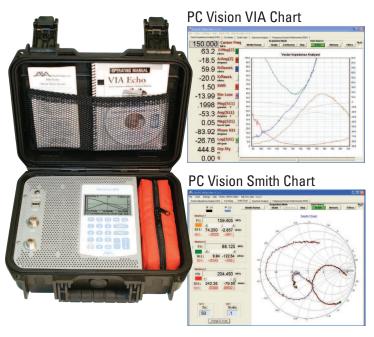




MRI Analyzers

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VIA Echo MRI™ Analyzer For Testing MRI or NMR System Coils 0.1-20T



The VIA Echo MRI is AEA Technology's latest Vector Impedance Analyzer that accurately measures impedances from 2 to 2000 Ohms, resistance, phase angle, X, Q, return loss, and SWR. The Echo MRI can simultaneously provide graphical display for any two measurement parameters and a numeric display of a third parameter. The frequency sweep is plotted in the X axis and independent left and right Y axis plots are user selectable The Echo MRI is <u>Ultra Low-Magnetic</u> and has the ability to function in close proximity to high magnetic fields making it the ideal test instrument for installing and servicing MRI or NMR systems. Additionally, our Echo products come with Echo PC Vision™ software. This new software permits remote control operation of the Echo MRI to upload test results to a PC or laptop, view the VIA or Smith Charts in full color, store and print complete analyzer documentation. While the Echo's LCD can support displaying two parameters, PC Vision can display one or all the testing parameters at once. The Echo MRI will save time, reduce capital expenditures, and reduce costs typically associated with the installation and servicing of MRI or NMR Systems.

Features

• Frequency range: 4MHz to 1.0GHz 1KHz

• Tuning Resolution:

Measurement Speed: ~ 2 sweeps/second

• Freq. Display Width: 250KHz x N (N = integer)

• Impedance Range: 0 to 2000 Ohms

• Impedance Scales: 0 to 50 Ohms Minimum

0 to 2000 Ohms Maximum

• Phase Angle Scales: ± 15 to ± 180 Degrees

· Harmonic & Spurious: > 15 dB below fundamental

Output Power: - 10 dBm @ 50 Ohms

• PC Communications: **USB 2.0**

• External Power: 15VDC @ 500mA Minimum

 Internal Power Lead Acid 12VDC battery

• Input Connectors: N Type S11 & S21 port

· Display: Quarter VGA backlit LCD

• Non Volatile Memory: 250 Instrument presets & data

• Dimensions: 13x11x5" (330x280x155mm)

· Weight: 9.5 lbs (4.25Kg)

Model

VIA Echo MRI6025-5350

Includes:

Echo PC Vision Software USB Cable & Extension Operator Manual Quick Start Guide AC Adapter, 90-240VAC 50-60 Hz DC Extension Cord Calibration Terminators N & BNC N-to-BNC Adapter Set Removable Magnetic Material Pouch

Enhanced Benefits

- All the benefits of the Bravo MRI's plus enhancements
- Excellent for NMR testing/tuning to 20T
- Ultra Low-Magnetic signature
- · Larger quarter VGA LCD backlit display
- Third measurement parameter digitally displayed
- Larger keypad with full alpha-numerics
- Easier menu/feature selection system
- Integral hard case designed for instrument protection includes:

Pocket for non-magnetic materials

Removable pouch for magnetic items

- · Printed Operator Manual and Quick Start Guide
- Operates in high magnetic environments
- Faster USB-2 port communications
- Extended USB Cable for remote PC operation
- New USB Echo PC Vision software included

For 0.1 to 3.0T MRI Systems see VIA Bravo MRI on reverse



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