RigExpert Antenna Analyzer AA-170

0.1 ... 170 MHz

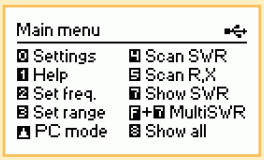
RigExpert AA-170 is a powerful antenna analyzer designed for testing, checking, tuning or repairing antennas and antenna feedlines.

Mainly, this is ah SWR (Standing Wave Ratio) and impedance measurement instrument (vector impedance analyzer).

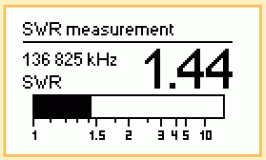
Easy-to use measurement modes, as well as additional features such as connection to a personal computer (to plot Smith charts, etc.), make RigExpert AA-170 attractive for professionals and hobbyists.

The following tasks are easily accomplished by using this analyzer:

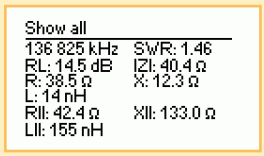
- Rapid check-out of an antenna
- Tuning an antenna to resonance
- Antenna SWR and impedance measurement and comparison before and after specific event (rain, hurricane, etc.)
- Making coaxial lines or measuring their parameters
- Cable testing and fault location
- Measuring capacitance or inductance of reactive loads



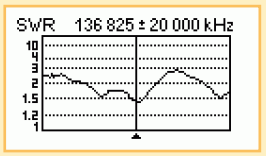
Main Menu



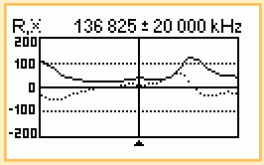
Single-point SWR measurement



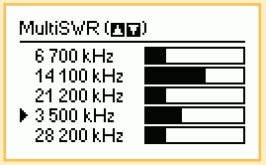
"Show all" screen



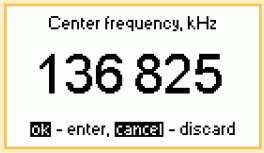
SWR graph



R, X graph

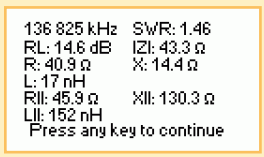


Multi-point SWR measurement

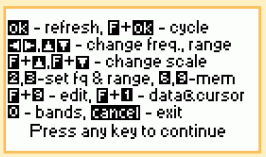


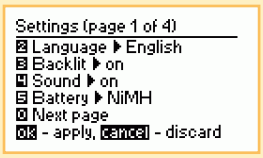
Frequency entry

"Save to memory" screen

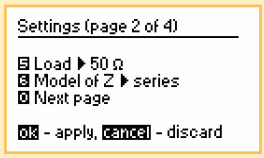


Data values at cursor





First page of the Settings menu



Second page of the Settings menu

Specifications

Frequency range: 0.1 to 170 MHz
Frequency entry: 1 kHz resolution
SWR measurement range: 1 to 10
SWR measurement for 50 and 75-Ohm systems
SWR display: numerical or easily-readable bar
R and X range: 0…1000, -1000…1000 in numerical mode,
0…200, -200…200 in graph mode

Display modes:

- SWR at single or multiple frequencies
- SWR, return loss, R, X, Z, L, C at single frequency
- SWR graph, 100 points
- R, X graph, 100 points

RF output:

- Connector type: UHF (SO-239)
- Output signal shape: rectangular, 0.1…30 MHz. For higher frequencies, third or fifth harmonics are used.
- Output power: about -10 dBm (at 50 Ohm load)

Power:

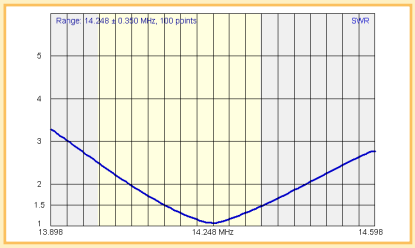
- Three 1.5 V, alkaline batteries, type AA
- Three 1.2 V, 1800…2700 mA·h, Ni-MH batteries, type AA
- Max. 3 hours of continuous measurement, max. 2 days in stand-by mode when fully charged batteries are used
- When the analyzer is connected to a PC or a DC adapter with USB socket, it takes power from these sources

Interface:

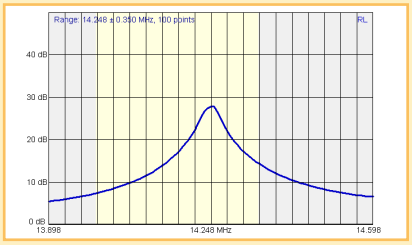
- 128x64 graphical backlit LCD
- 6x3 keys on the water-proof keypad
- Multilingual menus and help screens
- USB connection to a personal computer
- Free of charge AntScope software for Windows, Mac OS and Linux

Dimensions: 22x10x3.6 cm (9x4x1.5”)
Operating temperature: 0…40 °C (32…104 °F)
Weight (including batteries): 400g (14 Oz)

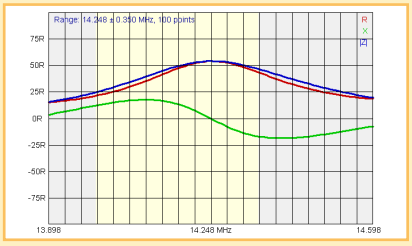
AntScope software capabilities



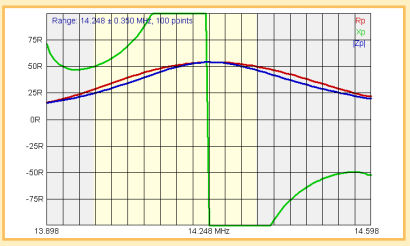
SWR graph



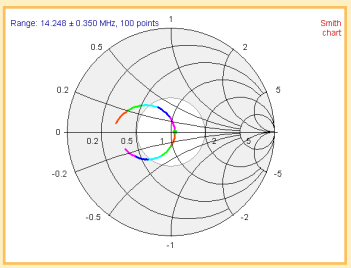
Return loss graph



R,X,Z graph,
series model



R,X,Z graph,
parallel model



Smith chart