RigExpert Antenna Analyzer AA-170

0.1 ... 170 MHz

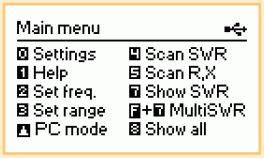
RigExpert AA-170 is a powerful antenna analyzer designed for testing, checking, tuning or repairing antennas and antenna feedlines.

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

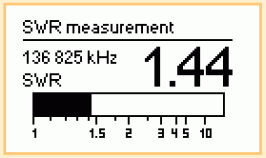
Easy-to use measurement modes, as well as additional features such as connection to a personal computer (to plot Smith charts, etc.), make RigExpert AA-170 attractive for professionals and hobbyists.

The following tasks are easily accomplished by using this analyzer:

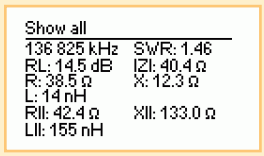
- Rapid check-out of an antenna
- Tuning an antenna to resonance
- Antenna SWR and impedance measurement and comparison before and after specific event (rain, hurricane, etc.)
- Making coaxial lines or measuring their parameters
- Cable testing and fault location
- Measuring capacitance or inductance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



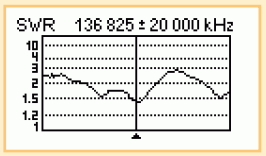
Main Menu



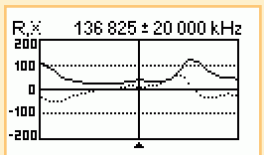
Single-point SWR measurement



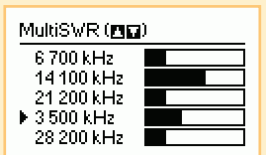
"Show all" screen



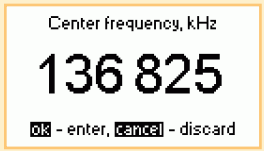
SWR graph



R, X graph

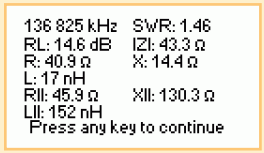


Multi-point SWR measurement

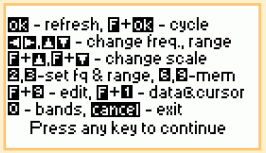


Frequency entry

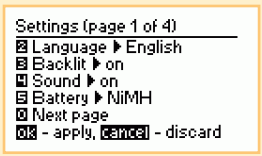
"Save to memory" screen



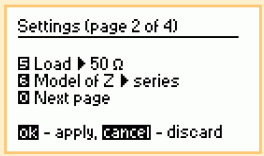
Data values at cursor



Help screen for one of measurement modes



First page of the Settings menu



Second page of the Settings menu

Rig Expert Ukraine Ltd., Yakira st. 17A, 04119, Kyiv, phone/fax +380 44 353-92-42

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:

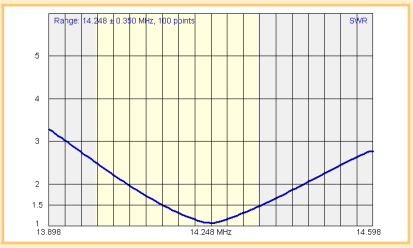
- Three 1.5 V, alkaline batteries, type AA
- Three 1.2 V, 1800…2700 mA·h, Ni-MH batteries, type AA
- Max. 3 hours of continuous measurement, max. 2 days in stand-by mode when fully charged batteries are used
- When the analyzer is connected to a PC or a DC adapter with USB socket, it takes power from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

Interface:

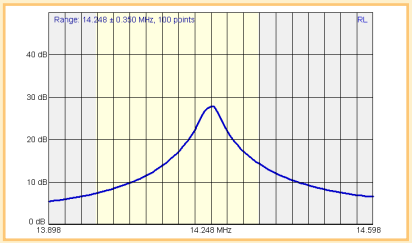
- 128x64 graphical backlit LCD
- 6x3 keys on the water-proof keypad
- Multilingual menus and help screens
- USB connection to a personal computer
- Free of charge AntScope software for Windows, Mac OS and Linux

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

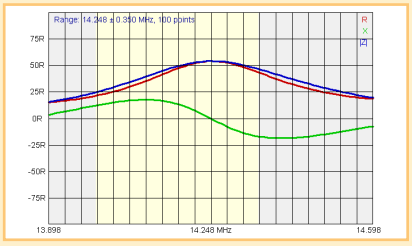
AntScope software capabilities



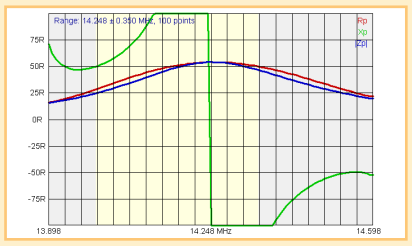
SWR graph



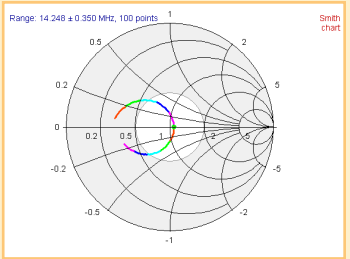
Return loss graph



R,X,Z graph,
series model



R,X,Z graph,
parallel model



Smith chart