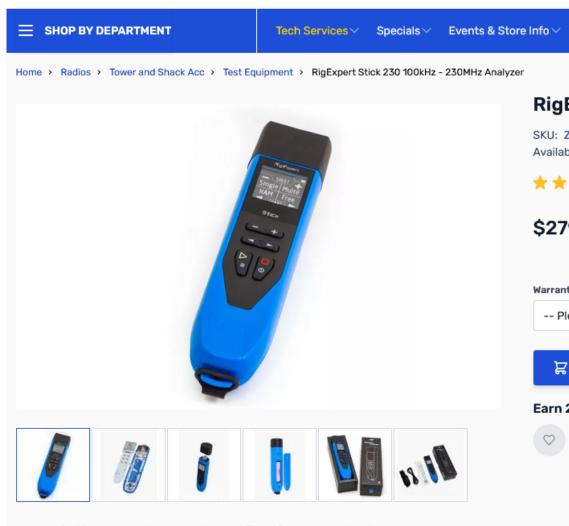
RigExpert Stick 230 Antenna Analyzer

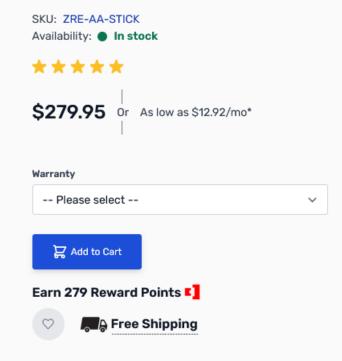
Jack Himes NC3O

SMRA Monthly Meeting

• October 21, 2025



RigExpert Stick 230 100kHz - 230MHz Analyzer



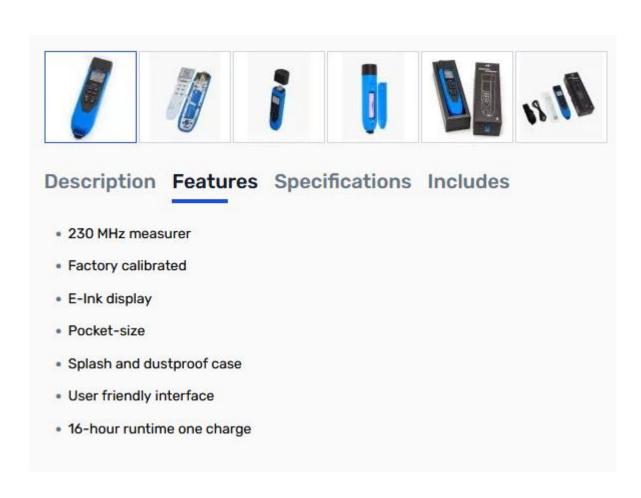
Description Features Specifications Includes

RigExpert Stick 230 100kHz - 230MHz Analyzer

The analyzer is designed for measuring SWR (standing wave ratio), return loss, as well as other parameters of cable and antenna systems in the range of 100 kHz to 230 MHz.

The following tasks are easily accomplished by using this analyzer, rapid check-out of an antenna in the field or stationary conditions, tuning an antenna to resonance, comparing characteristics of an antenna before and after a specific event (rain, hurricane, etc.), and measuring capacitance or inductance of reactive loads.

Stick 230 Features



Stick 230 Specifications















Description Features Specifications Includes

Frequency range 0,1 MHz - 230 MHz

Display Sunlight readable E-Ink, 200x200 pixels

Operating time (continuous measurements) 16 hours

Operating modes Multé (quick check of multiband antennas), HAM (quick check of band antenna), Single (measure SWR, Z, R, X, C, L, RL, Phase, Magnitude, serial/parallel model), SWR chart, OSL calibration mode

Built in Helper Yes, at the push of a button

Localizations English, Japan

Type of antenna connector UHF (SO-239)

Output power -10 dBm (at a load of 50 Ohms).

Battery One Lithium-ion 18650 (included)

Charge time: 3 hours via USB Type-C port

Operating temperature 0-40 °C (32-104 °F)

PC/Mobile Interfaces USB 2.0 Type-C, Bluetooth ver. 4.2 BLE Single-mode, Class B

Dimensions 185 x 40 x 33 mm (7.3 x 1.6 x 1.3 inches)

Weight (with battery installed) 185 grams (6.5 Oz)

Warranty 2-years RigExpertCare™

Stick 230 comes with:



Description Features Specifications Includes

- RigExpert Stick 230 antenna analyzer (with a Li-ion battery type 18650)
- Quick Start Guide
- Neck strap
- USB cable

Examples of using the RigExpert Stick 230 Antenna Analyzer.

- 1. Tuning my 80-40-20 vertical Tri-Band garden antenna. (This is done by loosening 2 set screws and pushing in or pulling out the whips.)
- 2. Checking a 25 ft length of RG-8X coax.
- 3. Using a RigExpert 230 Stick with a computer. (Allows you to view all HF bands on a big screen monitor at the same time.)



This Hustler Tri-Band design has been around for decades. It is mounted on a 4 ft ground rod, sometimes radials are attached but not always. Today, the coax shield acts as a counterpoise with a ferrite choke where it enters the house. Using a LDG Auto-Tuner it is usable on 80, 40, 20, 15, & 10 meter bands. A video cam is focused on that area, so I am alerted if anyone approaches the antenna.



 keystrokes and A single press changes the frequency value minimally. If you press and hold the keys, the frequency will change continuously with an accelerated step.
pressing and holding the key for 2 seconds. After that, an information window will appear on the analyzer
screen. Press key again. A window will appear on the analyzer screen with the setting of the operating
frequency. The keys select the cursor position to change units, tens, hundreds, thousands of
kilohertz, and the keys change the value.
A single press of the key saves the change and returns to Single mode.
A single press of the key returns to Single mode without saving changes.
The help menu is accessible by pressing and holding the key and then selecting the Help mode with the keys. Multé mode.
Multé is a new mode, in which you can quickly assess how well your antenna works on different HAM bands.
The result is displayed as stars. The smaller the SWR of the antenna in the range, the more stars.
Table of the dependence of the number of stars on the SWR:
5× - SWR from 1.0 to 1.1
4★ - SWR from 1.1 to 1.15
3 - SWR from 1.15 to 1.3
2 - SWR from 1.3 to 1.7
1 - SWR from 1.7 to 3.0
The SWR over 3 analyzer in Multé mode ignores.
The SVR over 3 analyzer in Multe mode lightness.
f, after scanning, the analyzer did not find a single resonance, then this means that either your antenna has a ninimum SWR of more than 3, or the antenna or coaxial cable is damaged.

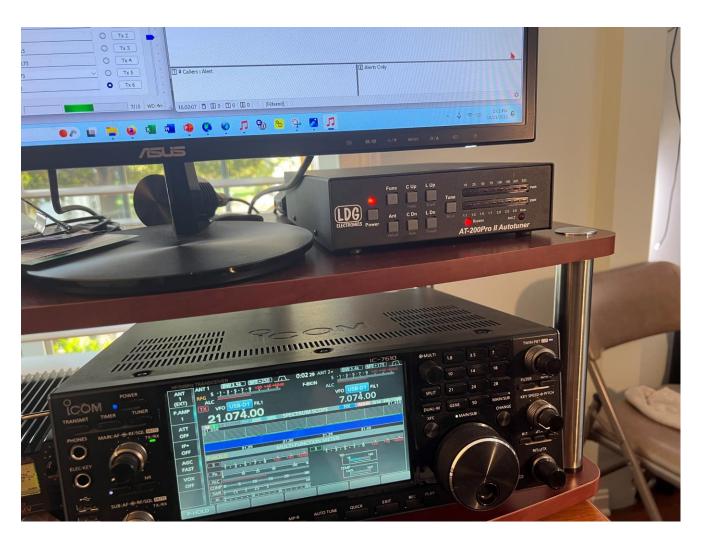
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Note: if the SWR on a band is over 3:1, you will not see that band listed in the Multe' screens. The tuner inside your radio probably cannot match it, but if you have a good external tuner like the LDG shown below you will be able to use it on the 15m band as seen below.



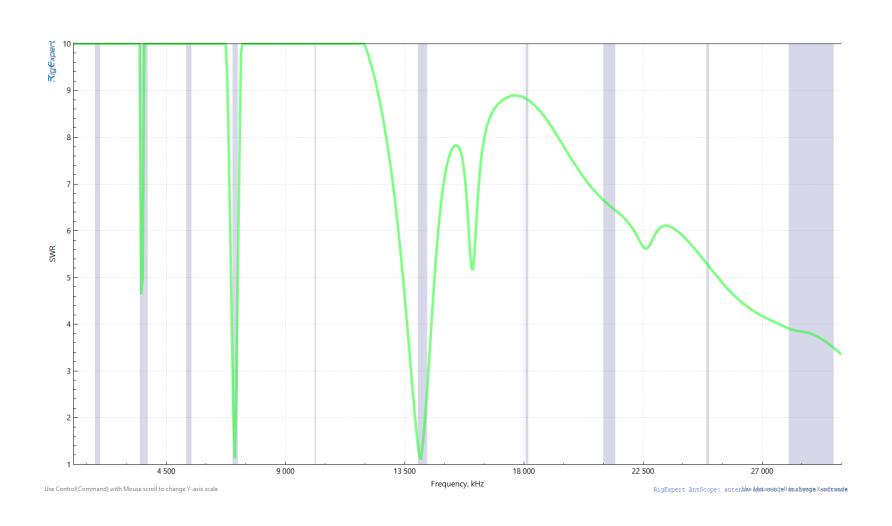


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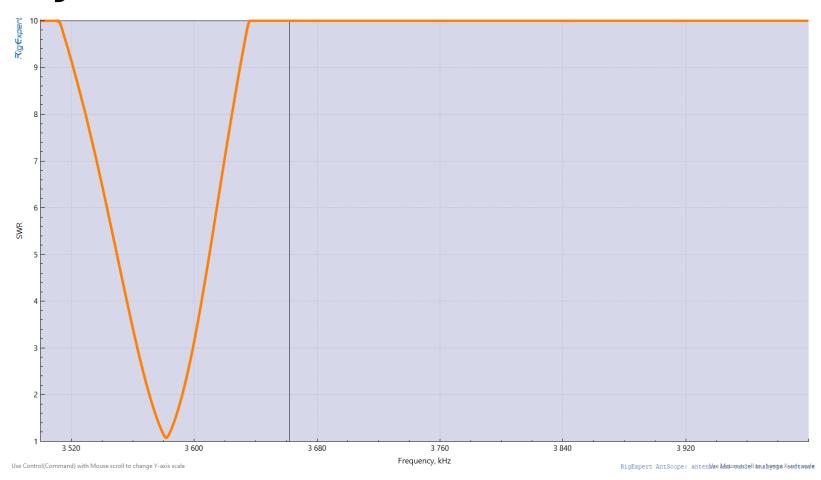
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Hustler Tri-Band SWR from 1 to 30 MHz



A closer look at the 80 m band shows the SWR low point at 3.582 MHz. Very close to the 3.573 MHz frequency of FT8.



Checking a coax cable for problems with a dummy load and the RigExpert 230 Stick.

A25 ft RG-8X cable with PL-259 connectors was terminated with a 50 ohm dummy load and checked with a RigExpert 230 Stick Antenna Analyzer operating in BlueTooth mode.



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