



# TSA4G1 USB Mini Spectrum Analyzer

TSA4G1 is a very cost-effective USB mini spectrum analyzer. It can do most of all basic test items that a general spectrum analyzer can do. TSA4G1 is a very tiny instrument, but it can cover very wide measurement range. The frequency up to 4.15 GHz, power up to 1 W, noise level as low as  $-110$  dBm. The test data will be displayed with calibrated level, linearity and frequency.

TSA4G1 is very suitable for field test because it is very small and convenient to carry. It can be used as a device to monitor RF signal. It is also suitable for EMC test with near field probe.

Remote feature allows the product to be controlled remotely from far end computer via the internet. This allows easy setup of RF monitor system.

## Features:

- ✓ Accurate and stable in frequency / level
- ✓ Extra low cost, extra low weight, best performance price rate
- ✓ Digitally synthesized RF system
- ✓ Frequency range up to 4.15 GHz
- ✓ Input Levels - 110 dBm to +30 dBm
- ✓ Connect to PC through USB without battery pack



## Application:

- Wireless Remotes, Cordless Phones, Wireless Monitors
- ATE system
- Education
- Industrial, Scientific, Medical (ISM) Band Application
- Cellular and PCS
- Two-Way Radio, Trunk Radio
- Bluetooth, WiFi, WiMax
- Field Service and Installation



## SPECIFICATIONS

ITEMS	DESCRIPTION
Frequency Range	1 MHz to 4.15 GHz
Minimum Step for Scanning	2 kHz at 1 MHz SPAN
Frequency Stability	< +/-5 ppm with software calibration
Frequency Spans	1 MHz to 1000 MHz for normal scanning, 0.2 MHz to 200 MHz for fast scanning.
Resolution Bandwidths	50 KHz, 100 KHz, 200 KHz, and 500 KHz, auto setting and free setting
Sweep Time	x1 to x32, basic scanning is around 2.3 s, fast scan is around 0.5 s
Input Level Range	-110 dBm to +30 dBm
Input Level Overload	Less than +20 dBm for 1 minute max at any scale when external attenuator is not connected. DC block to +/-25 VDC Less than +33 dBm when external attenuator is connected.
Reference Level Accuracy	< 3 dB between 100 MHz to 4.15 GHz at top level (1 GHz)
Display Range Linearity	< 4 dB (1 GHz)
Reference Level Flatness	< 2 dB within 100 MHz span at top level
Reference Level Range	-60 dBm to 0 dBm range without external attenuator -30 dBm to 30 dBm range with external attenuator
Display Range	80 dB usable
Noise Floor	-115 dBm with 5 MHz SPAN and -60 dBm reference level at 1 GHz
Power Source	5 V from USB port
Dimensions	87.5 mm(L) x 23 mm(W) x 15 mm(H)
Weight	Less than 20 g.