



Triarchy Technologies CORP.

Vincit Omnia Veritas

ESA12G1 USB Mini Spectrum Analyzer

ESA12G1 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. ESA12G1 is a very tiny instrument, but it can cover very wide measurement range. The frequency up to 14 GHz, power up to 1 W, noise level as low as -100 dBm. The test data will be displayed with level, linearity and frequency calibrated.

ESA12G1 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.



Features:

- Accurate and stable in frequency / level
- Extra low cost, extra low weight, best performance price rate
- Digitally synthesized RF system
- Frequency range from 4.9GHz to 14 GHz
- Input Levels - 95 dBm to +10 dBm for Band1
-80 dBm to +30dBm for Band2
- Connect to PC through USB without battery pack

Application:

- Wireless Remotes, Wireless Monitors
- ATE system
- Education
- Industrial, Scientific, Medical (ISM) Band Application
- X band radar system
- broadcast Satellite
- Field Service and Installation



ESA12G1 USB Mini Spectrum Analyzer specifications:

ITEMS	DESCRIPTION
Frequency Range	Band1: 4.9GHz to 11.1 GHz, Band2: 11.1GHz to 14 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
Resolution Bandwidths	50 KHz, 100 KHz, 200 KHz, and 500 KHz, auto setting with Span
Sweep Time	x1 to x32, basic sweep time is around 2.2 seconds
Input Level Range	-95 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	< 4 dB between 4.9 GHz to 11 GHz at top level (10 GHz)
Display Range Linearity	< 6 dB (10 GHz) The linearity calibration is only worked at Band1
Reference Level Flatness	< 3 dB within 100 MHz span at top level
Reference Level Range	-50 dBm to -20 dBm range without external attenuator for band1 -20 dBm to 10 dBm range with external attenuator for band1 -30 dBm to 0 dBm range without external attenuator for band2 0 dBm to 30 dBm range with external attenuator for band2
Display Range	80 dB usable
Noise Floor	-100 dBm with 5 MHz SPAN and -50 dBm reference level at 10 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