COM-POWER CORPORATION

Spectrum Analyzer

SPA-3000

Features

Range - 9 kHz - 3 GHz

Resolution bandwidth - 9 & 120 kHz

Large TFT Color Display

Lightweight

Description

The SPA-9300 is a high performance, low cost, easy to use, portable spectrum analyer for EMI testing. It has wide frequency range and low noise floor to enhances measurement range. Advanced easy to use interface make your work simple. SPA-3000 offers you the greatest performance-price ratio in the market.

User-oriented interface design allow easy operation of complex functionalities. A high-resolution 6.4" color TFT LCD provides high quality image display. Traces are drawn in different colors, allowing recognition of small disparities at a glance. Split window mode delivers the ability for monitoring two different bands on the same display, making user have two alternate-sweep spectrum analyzers in one single unit.

The SPA-3000 can be used as standalone measurement device without PC connection. Users can define their own macros through the keypad on the front panel and stored in 10 Sequence sets. Running sequence can be paused for measured result observation or staff intervention. Repeat or Single run mode can be selected for different applications. Sequence function can quite fit for EMC testing, production and education.

Application

The SPA-3000 Spectrum Analyzer is extremely valuable for locating the EMI noise source on systems in order to meet various regulatory agency requirements. Its features and affordable price allows design engineers to use it to perform preliminary radiated and conducted EMI testing.

Wide measurement range and state-of-the-art design, SPA-3000's has outstanding noise floor level, -152dBm/Hz @ 600MHz. This allow measurement of weak signals during EMI emission testing. The sensitivity can further increased by using the an optional preamplifier. It can also used with near field probes, antennas and Line impedance stabilization network for a complete EMI testing solution.

The front panel has a USB USB flash drive for various file transactions, such as setup info, trace data, and display images. In addition, it also supports printers with USB ports for direct print out.

The backpanel has a GPIB connector for remote control using PC software.

Specifications

Frequency	
Frequency Range	9kHz ~ 3GHz
Aging Rate	10ppm, 0-50 C, 5ppm/yr
Span Range	2kHz ~ 3GHz in 1-2-5 sequence, full span, zero span
Phase Noise	-80dBc/Hz @1GHz , 20kHz offset typical
Sweep Time Range	50ms ~ 25.6s
Resolution Bandwidth	
RBW Range	3kHz, 9 kHz, 30kHz, 120 kHz, 300kHz, 4MHz
RBW Accuracy	15%
Video Bandwidth Range	10Hz ~ 1MHz in 1-3 steps
Amplitude	
Measurement Range	-1 03dBm ~ +20dBm, 1MHz ~ 15MHz , Ref. Level -30dBm -120 1 dBm~+20dBm, 15MHz ~600MHz, Ref. Level@-50dBm -117 -1 d Bm~+20d Bm, 600MHz~2.3GHz, Ref. Level@-50dBm -115 1dBm~+20dBm, 2.3GHz ~ 3GHz
Overload Protection	+30dBm, 25VDC
Reference Level	-11 0dBm ~ +20dBm
Range	1dB @100MHz
Accuracy	1 d B
Frequency Flatness	1 d B over 70d B
Dynamic Range	
Average Noise Floor	-1 35dBm/Hz, 1 MHz ~ 15MHz , Ref. Level -30dBm -152 1 dBm/Hz, 15MHz ~ 600MHz, Ref. Level@-50dBm -149 1 dBm/Hz, 600MHz ~ 2.3GHz, Ref. Level@-50dBm -147 1dBm/Hz, 2.3GHz ~ 3GHz
Third Inter-Modulation	< -70dBc @-40dBm Input , Ref. Level@-30dBm
Harmonic Distortion	< -60dBc RF Input < -40dBm, Ref. Level@-30dBm < -110dBm @3kHz RBW
Non-Harmonic Spurious	<-110 dBm@3 kHz RBW
General	
Display	640 x 480 high resolution color TFT LCD
Internal Memory	10 Traces , 10 Setup info , 10 Limit lines, , 5 Corrections 10 Sequences
Markers	10 Markers for peaks; 5normal-delta marker pairs ; Functions: Delta , Peak , Marker Track
Trace Detection	3 traces with Peak, Maximum hold, Freeze, Average and Trace math
Power Measurement	ACPR, OCBW, Channel power, N dB BW, and Phase jitter
Autoset Function	Auto tuning the measurement result for observation
Sequence	Automated test by uesr-defined macros without any remote control
RF-Input	Type: N female, 50 nominal
RF input VSWR	<2 : 1 @ 0dBm Ref. Level
GPIB Interface	IEEE 488 bus
USB Connector	Type: SMB male, outputs +9V/100mA max.
POWER SOURCE	AC 100 ~ 240V, 50/60Hz
Dimensions & Weight	330(W) x 170(H) x 340(D) mm, Approx. 6kg

All values are typical values unless specified.
Specifications are subject to change without notice.