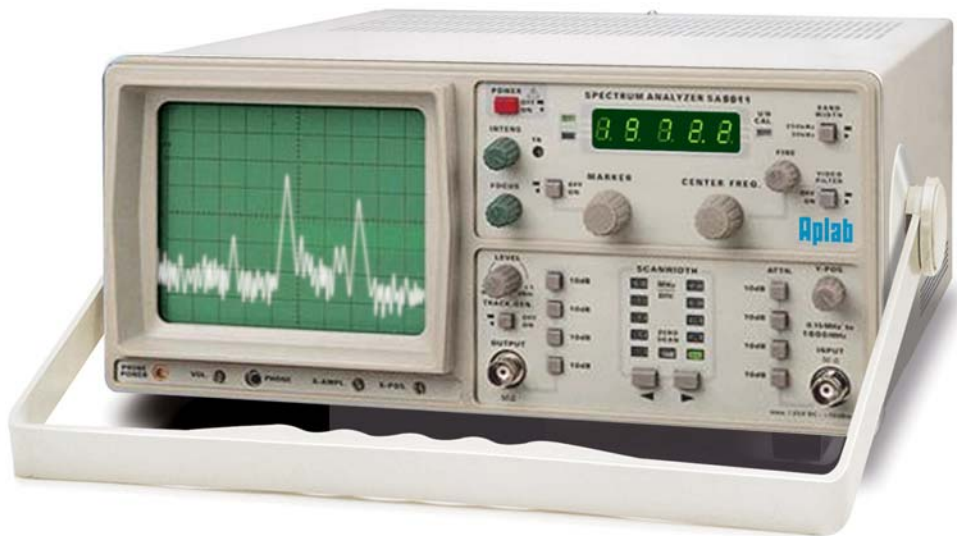


# Aplab

## 1GHz SPECTRUM ANALYZER SA3010 / SA3011



Aplab Spectrum Analyzer can be used to observe and analyze wide variety of signals right upto 1050MHz.

Test different types of communication equipment.

Test mobile handsets, cord-less phones, AM/FM transmitters and receivers.

Test Cable TV levels and frequency response.

Test Master Antenna TV systems.

Measure communications transmitter spurious radiation.

Locate sources of EMI.

Measure unwanted RF radiation.

### Features

- Frequency Range : 150KHz to 1050MHz
- 4½ Digit Display : Centre & Marker Frequency, 0.1MHz Resolution
- Amplitude Range : -100dBm to +13dBm
- Filters : 20KHz, 400KHz & Video Filter
- AM /FM Demodulator Included
- Full Range Built-in Tracking Generator : 0.15MHz to 1050MHz (only for SA3011)
- Output Power : +1dBm to -50dBm (50 ohms)
- Optional near-field sniffer probe set to locate cable and PC board emission "hot-spots, evaluate EMC problems at the breadboard and prototype level. Ideal solution for RF leakage/radiation detection

## Technical Specifications

### FREQUENCY

Frequency Range : 150KHz to 1050MHz (-3dB).  
 Frequency Resolution : Resolution 100KHz,  
 Displayed Display 4 digit.  
 Center Frequency :  $\pm 100$ KHz.  
 Display Accuracy  
 Marker Accuracy : 0.1% Span +100KHz.  
 Frequency stability : <150KHz / hr.  
 (Drift)  
 Frequency Scanwidth : Zero scan 0Hz/div, and 100KHz/  
 div to 100MHz/div in 1-2-5  
 sequence.

Frequency Scanwidth :  $\pm 10\%$ .  
 Accuracy  
 IF Bandwidth (-3dB) : Resolution 20KHz & 400KHz.  
 Video Bandwidth, VBW : 4KHz.  
 Sweep Time (Fixed) : 23ms.

### AMPLITUDE

Amplitude Range : -100dBm to +13dBm.  
 Screen Display Range : 80dB (10dB/div).  
 Reference Level : -27dBm to +13 dBm (in 10dB  
 steps).

Reference Level :  $\pm 2$ dB.  
 Accuracy  
 Average Noise Level : -99dBm (20KHz RBW).  
 Frequency Response :  $\pm 2$ dB.  
 (Relative to 250MHz,  
 ATTN 10dB)  
 Spurious Responses : <-75dBc (2 signals, -27dBm  
 Intermodulation each Freq. Distance >3MHz).  
 (3<sup>rd</sup> order)

Harmonic Distortion : <-75dBc.  
 (2<sup>nd</sup>, 3<sup>rd</sup>)

Absolute Amplitude :  $\pm 2.5$ dB.  
 Accuracy

### INPUT

Input Impedance : 50 $\Omega$ .  
 Input Connector : BNC.  
 Input Attenuator : 0 to 40 dB (4 x 10 dB steps).  
 Input Attenuator :  $\pm 2$ dB / 10dB step.  
 Accuracy

Max. Input Level : 10dBm, (0dB attenuation).  
 +20dBm (with 20 dB attenuation).  
 DC :  $\pm 25$ V.

### TRACKING GENERATOR (only for SA3011)

Output Frequency : 150KHz to 1050MHz.  
 Range  
 Output Power Level : -50dBm to +1dBm (in 10dB steps  
 & fine control).

Output Attenuator : 0 to 40 dB (4 x 10 dB steps).

Output Attenuator :  $\pm 1$ dB.  
 Accuracy

Output Flatness :  $\pm 1.5$ dB.  
 (150KHz to 1050MHz)

Spurious Outputs :  
 Harmonic Spurs & : <20dBc.  
 Non harmonic Spurs

Output Impedance : 50 $\Omega$  (BNC female).

### MISCELLANEOUS

AM/Demodulator : Earphones, Load Impedance  
 Included Ear phones : >8 Ohms.

Load Impedance : >8 $\Omega$ .

### GENERAL

Display : CRT 6 inch, 8 x 10 div internal  
 graticule.

Trace Rotation : Adjustable on front panel.

Power : 230V AC  $\pm 10\%$ , 47-53Hz.  
 Optional 115V AC  $\pm 10\%$ ,  
 57-63Hz.

Power Consumption : Approx. 25W.

Operating Temp. : +10 $^{\circ}$ C to +40 $^{\circ}$ C.

Protective system : Safety class 1 (IEC 1010-1).

Dimension : 265 (W) x 125 (H) x 380 (D) mm.

Weight : Approx. 7 Kg.

### ACCESSORIES SUPPLIED

Mains Cord - 1 No.

BNC to BNC - 1 No.

Instruction Manual - 1 No.

### OPTIONAL ACCESSORIES

1. High Impedance (Active FET Probe) - SAZ330-H
2. Magnetic Field Probe - SAZ330-M
3. Electric Field Probe - SAZ330-E
4. Feed-thru Terminator
5. 4 AA size Batteries



**ApLab** Test & Measurement Instruments

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