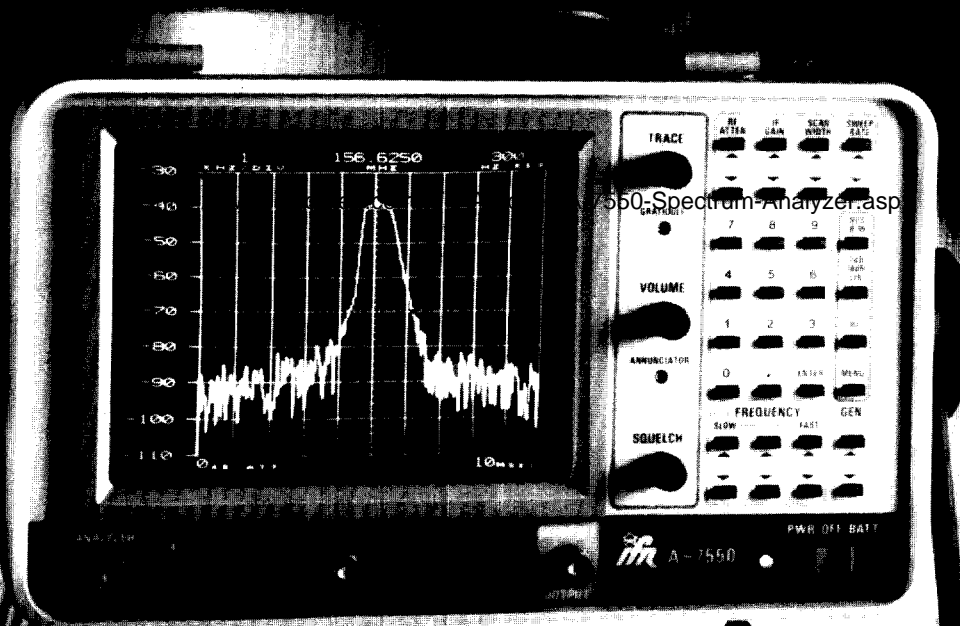


The A-7550 Spectrum Analyzer

10 kHz to 1 GHz



Impressive Standard Features Include:

- Fully synthesized RF systems
- 10 kHz to 1 GHz frequency coverage
- Direct center frequency entry
- Accurate center frequency readout
- 70 dB dynamic range
- 300 Hz resolution bandwidth
- Menu driven display modes
- VRS™ (Vertical Raster Scan) CRT display
- Single function keyboard entry
- Automatically scaled electronic graticule
- Variable top scale reference (+30 to -95 in 1 dB steps)
- IF gain in 1 dB steps
- 50/75Ω selectable input impedances (optional)
- Automatic optimization
- Automatic amplitude calibration
- Selectable linear / log display modes
- Digital storage of all displayed parameters
- Average, compare, reference, and peak hold display modes
- 300 Hz and 30 kHz video filters

A-7550

performance specifications (after 15 minutes operation)

FREQUENCY

Range: 10 kHz to 1 GHz in 100 Hz steps

Readout Accuracy: 3% of frequency display span plus time base accuracy

Time Base Stability: ± 25 ppm

Frequency Span Ranges: 1 kHz to 100 MHz/DIV in 1-2-5 sequence plus zero span

Sweep Rates: 5mS to 2 sec/DIV

Frequency Span Accuracy: < 5% of the indicated frequency separation

Resolution Bandwidth: 300 Hz, 3 kHz, 30 kHz, 300 kHz and 3 MHz

Residual FM: < 100 Hz peak to peak at span widths below 200 kHz/DIV

Noise Sidebands (3 kHz Resolution Bandwidth): > 65 dB below peak CW signal at 5 x resolution bandwidth setting from CW signal (with 300 Hz video filter)

AMPLITUDE

Frequency Range: 100 kHz to 1 GHz

Measurement Range: -120 dBm to +30 dBm

Dynamic Range: 70 dB in 10 dB/DIV log scale
16 dB in 2 dB/DIV log scale
8 division with linear amplitude scale

3rd Order Intermodulation Products: < -70 dBc for two signals displayed
10 dB down from top reference level

Amplitude Scale Linearity: **10 dB/DIV log** — within 0.15 dB/dB, but not more than 2.5 dB over 70 dB dynamic range
2 dB/DIV log — ± 0.4 dB/2 dB, but not more than 1.5 dB over 14 dB dynamic range
Linear — demodulation linearity 3% of full scale

Amplitude Units: dBm, dBv, dB μ v, dBmV, dB μ W

Bandwidth Switching Error: ± 1 dB (± 2 dB for 300 Hz RBW)

Maximum Input Levels: 4 volts DC or +30 dBm with maximum input attenuation. +20 dBm for all other conditions.

RF Input Attenuator: 60 dB range in 10 dB steps

Accuracy: ± 0.5 dB/10 dB step

Impedance: 50 Ω nominal, 75 Ω optional with adapter

GENERAL CHARACTERISTICS

Dimensions: 33.3cm (13.1") wide, 18.5cm (7.3") high, 49.8cm (19.6") deep

Weight (approximate): 12.6 kg (28 lbs) without options

Temperature Range: 0° to 50° C

Power Requirements: **Line:** 106 to 266 VAC, 50 to 400 Hz
60 watts typical at 115 VAC (without options)
External D.C.: 12 to 30 VDC nominal
4.0 amps at 12V typical (without options)
2 amps at 28V typical (without options)

TRACKING GENERATOR (optional)

Frequency Range: 100 kHz to 1 GHz

Output Level: 0 dBm to -70 dBm in 1 dB steps

Flatness: ± 2 dB

Residual FM: < 100 Hz

Output Impedance: 50 Ω nominal (75 Ω optional with adapter)

Spurious: Harmonics < 20 dBc
Non-harmonics < 30 dBc

RECEIVER (optional)

Range: 100 kHz to 1 GHz

Center Frequency Resolution: 100 Hz

Sensitivity: 2 μ V typical

Selectivity (at 3 dB):	Mode	Receiver Bandwidth
		FM 2
	FM 1	15 kHz
	SSB	6 kHz
	AM 1	6 kHz
	AM 2	15 kHz

Adjacent Channel Rejection:	Receiver Bandwidth at 3 dB	40 dB DOWN AT
		200 kHz
	15 kHz	± 27 kHz
	6 kHz	± 12 kHz (35 dB)

QUASI-PEAK DETECTOR (optional)

Frequency Range	Bandwidth at 6 dB	Charge Time Constant (mS)	Discharge Time Constant (mS)
< 150 kHz	200 Hz	TC1 45 mS	TC1 500
150 kHz to 30 MHz	9 kHz	TC2 1 mS	TC2 160
30 MHz to 1 GHz	120 kHz	TC3 1 mS	TC3 550



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