SECTION 2

COMPOSITION AND SPECIFICATIONS

2.1 Composition

Table 2-1 Composition

Item	No.	Name	Q'ty
Instrument	1	MS610A Spectrum Analyzer	1
Accessories Supplied	2	Coaxial Cable S-5DWP•5D2W•S-5DWP 1 m	1
	3	Coaxial Cable BNC-P•RG-55/U•N-P 1 m	1
	4	Power Cord	1
	5	Fuse AC *** A	2
	6	Operation Manual	1

2.2 Specifications

Table 2-2 Specifications

Frequency		
Frequency Range	10kHz to 2GHz	
Display and Accuracy	4-digit LED, resolution 1MHz, CENTER/START switchability, accuracy of ±10MHz	
Frequency Span	Span *1	Zero and 0.1MHz to 1GHz, 1, 2, 5 sequence
	Full Span	0 to 2GHz (with marker)
	Accuracy	±5%

*1. Span width is shown on a ten-section scale on the screen.

Table 2-2 Specifications (Cont.)

Frequency (Cont.)			
Resolution	Resolution Bandwidth		1kHz to 1MHz (3dB) 1, 3 sequence (For option 02, 9kHz, 120kHz: 6dB bandwidth)
	Selectivity		15:1 or less; 60dB/3dB Bandwidth Ratio (For 9kHz, 120kHz, 60dB/6dB bandwidth ratio)
Stability	Stability		100kHz or less/5 minutes, one hour, after power-on, for fixed frequency settings
	Residual FM		5kHzp-p or less; sweep time 0.1 second or less
	Noise Sidebands		70dB or more Resolution Bandwidth: 1kHz Video Filter: 100Hz 30kHz away from signal
Amplitude			
Measurement and CRT Display Range	LOG	10dB/div	-115 to +20dBm CRT Display Range 72dB
		2dB/div	-66 to +20dBm CRT Display Range 16dB
	LIN		-66 to +20dBm CRT Display Range 0 to 1
Log Scale Linearity			±1.5dB/72dB ±1dB/16dB
Frequency Response	±1.5dB (100kHz to 1.5GHz) +2dB -3dB (1.5GHz to 2GHz) When setting an input attenuator to 10dB or more.		
Reference Level *2	10dB/div		-50dBm to +20 dBm in 1dB steps
	2dB/div		-50dBm to +20dBm in 0.5dB steps
	LIN		-60dBm to +20dBm in 0.5dB steps
	Accuracy		±1.5dB or less

*2. Reference level scale is the top line on the screen.

Table 2-2 Specifications (Cont.)

Amplitude (Cont.)		
Dynamic Range	Average Noise Level	-115dBm or less Resolution Bandwidth: 1kHz Video Filter: 100Hz Frequency: 1MHz or more
	Second and Third Harmonic Distortion Factors	70dB or less for -30dBm input level Input attenuator: 0dB Frequency: 100kHz or more
	Residual Spurious Response	-100dBm or less for 50Ω Input Termination Input attenuator: 0dB Frequency: 100kHz or more
Video Filter		100Hz, 10kHz, OFF
Resolution Bandwidth Gain Variation		±1dB
Marker Level	Display	4-digit LED. The Max. level in the brightened portion at the center of the screen is displayed.
	Resolution	0.1dB Scale: 10dB/DIV and 2dB/DIV
Level Unit Switching		dBm, dBμ, dBμ/m
Coupled Function	COUPLED TO SPAN Resolution bandwidth and sweep time are optimized and set automatically by ganging with the FREQ SPAN. COUPLED TO REF Input Attenuator is optimized and set automatically by ganging with the REF LEVEL value. (Mixer level: -30dBm or less)	
Input	Terminal	50Ω, VSWR 1.5 or less, Type N-connector (when input attenuator is set to 10dB or more)
	Input Attenuator	0 to 50dB, in 10dB steps; 5 steps

Table 2-2 Specifications (Cont.)

Sweep	Time	10ms to 10s 1, 2, 5 sequence; 10 steps
	Trigger	FREE RUN, LINE, VIDEO, SINGLE
Calibrator Output	50MHz ±150kHz, -30dBm ±0.5dB, BNC Connector	
CRT	Graticule Division: 8 DIV x 10 DIV, 6-inch screen (diagonal measurement), P39 phosphor (medium persistence)	
External Control (for Option 01)	Compatible with IEEE STANDARD 488-1978, IEC625-1 Interface functions: SH1, AH1, T6, L4, SR0, RL1, PP0, PC1, DT0, C0. All functions except the power switch, CRT brightness, frequency adjustment, gain adjustment volume, and frequency setting dial, can be controlled.	
Detector-Time Constant (For Option 02)	Charge-time constant	1ms ±20%
	Discharge-time constant	160ms ±20% (for 9kHz resolution bandwidth) 550ms ±20% (for 120kHz resolution bandwidth)
Display Section Time Constant (For Option 02)	100ms ±30%	
Power	** Vac ±10%, 50/60Hz, 75VA	
Dimensions and Weight	177H, 284W, 351Dmm, 13.5kg	
Rated Operating Temperature Range	0 to 50°C	

Options 01: GP-IB
02: QP (Quasi Peak) Detector