

Summary specifications

GPIB Interface All major functions are remotely programmable.

Frequency

Measurement range 100 Hz to 400 MHz in 1 Hz steps.

Frequency span

Full Span 0 to 400 MHz.

/Div 10 Hz/div to 20 MHz/div in a 1,2,5, sequence and 40 MHz/div.

Log 1 to 7 decade logarithmic display.

Zero Span Time domain display of any signal at the Reference Frequency.

FM Demod Displays the frequency deviation of a signal against a time axis. Range is 18 Hz to 180 kHz full scale.

Meter A "bar chart" display indicates the instantaneous signal level at the Reference Frequency.

Amplitude

Measurement range $-150 \, \mathrm{dBm}$ to $+30 \, \mathrm{dBm}$; Overload protected to $50 \, \mathrm{W}$.

Displayed range

dB/Division 100 dB at 10 dB/div, to 5 dB at 0.5 dB/div in a 1,2,5, sequence.

Volts/Div Gives a linear amplitude scale.

Log Volts Two and a half decades of logarithmic display.

Accuracy ± 1 dB at any frequency, IF gain setting, RF attenuator setting and resolution bandwidth.

Frequency response \pm 0.3 dB. This error is included in the accuracy specification above.

Input 50Ω DC coupled. Reflection coefficient less than 0.10 for input attenuator settings \geq 10 dB.

Resolution

Resolution bandwidths Twelve filters with 3 dB bandwidths of 3 Hz to 1 MHz in a 1,3,10, sequence.

Shape factor 60 dB/3 dB selectivity < 11:1 except for 1 MHz filter.

Dynamic Range

Harmonic 80 dBc with -40 dBm at input mixer.

Non-Harmonic 80 dBc with -30 dBm at input mixer.

Display 100 dB.

Gain compression Never visible in AUTO mode for a single sinusoid test signal.

Intermodulation performance permits measurement to better than 95 dBc.

Residual responses Less than – 120 dBm referred to input mixer level.

Equivalent input noise sensitivity – 140 dBm using 3 Hz filter. Sweep time 10 ms/div to 20 s/div in a 1,2,5, sequence.

Video bandwidths 1 Hz to 50 kHz.

Video averaging Keys select either or both A and B traces 2 to 128 sweeps.

CAL (Calibrator) Automatic calibration sequence initiated by pressing front panel key.

Store/Recall Up to 9 instrument front panel settings can be stored and recalled in non-volatile memory.

Tracking generator

Frequency range 100 Hz to 400 MHz.

Accuracy \pm 0.5 dB at 10 MHz.

Frequency response ± 0.25 dB.

Output 50 Ω , reflection coefficient less than 0.10.

See Data Sheet for full specifications.