



1-4. SPECIFICATIONS

FREQUENCY

FREQUENCY MODES

0-50KHz Span:

The selected measurement is performed over the range of 0-50 KHz

Start to 0 Hz:

The selected measurement is performed over the range defined by the SPAN control with a start frequency of 0 Hz.

About Start:

The selected measurement is performed over the range defined by the SPAN control with constant start frequency.

About Center:

The selected measurement is performed over the range defined by the SPAN control with constant center frequency.

FREQUENCY RANGE:

0.02 Hz to 50 KHz

FREQUENCY SPANS:

2 Hz to 50 KHz in 2-5-10 sequence, except 25 KHz span is available instead of 20 KHz. Same spans are available in all Frequency Modes.

DISPLAY MODES:

Linear or Log frequency axis.

FREQUENCY ACCURACY:

The center frequency of each calculated line is accurate to  $\pm 0.001\%$ .

FREQUENCY RESOLUTION:

Standard:

Cursor resolution is limited by the calculated line spacing for the selected span and operating mode (see Table 1-4). Cursor frequency readout worst case error is  $\pm 0.5\%$  or  $\pm 0.25\%$  of span, depending on span and processing mode.

Improved Accuracy:

When measuring frequencies of discrete spectra, cursor resolution is improved by at least a factor of 10 resulting in a worst case error of  $\pm 0.05\%$  of span.

TABLE 1-4

SPAN	Single-channel		Dual- or Cross-channel	
	Calculated Line Spacing( $\beta$ )	Cent/Start Resolution	Calculated Line Spacing( $\beta$ )	Cent/Start Resolution
50 KHz	125 Hz	-	250 Hz	-
25 KHz	62.5 Hz	250 Hz	125 Hz	250 Hz
10 KHz	25 Hz	50 Hz	50 Hz	100 Hz
5 KHz	12.5 Hz	50 Hz	25 Hz	50 Hz
2 KHz	5 Hz	50 Hz	10 Hz	50 Hz
1 KHz	2.5 Hz	50 Hz	5 Hz	25 Hz
500 Hz	1.25 Hz	50 Hz	2.5 Hz	25 Hz
200 Hz	1.0 Hz	50 Hz	1.0 Hz	25 Hz
100 Hz	0.5 Hz	25 Hz	0.5 Hz	2.5 Hz
50 Hz	0.125 Hz	2.5 Hz	0.25 Hz	2.5 Hz
20 Hz	0.1 Hz	5.0 Hz	0.1 Hz	2.5 Hz
10 Hz	0.025 Hz	0.5 Hz	0.05 Hz	0.25 Hz
5 Hz	0.0125 Hz	0.5 Hz	0.025 Hz	0.25 Hz
2 Hz	0.01 Hz	0.5 Hz	0.01 Hz	0.25 Hz

In Single-Channel mode 2,5 and 10 Hz Spans are available to a maximum frequency of 500 Hz; 20 and 50 Hz Spans are available up to 5 KHz. In Dual or Cross-Channel mode, 2,5 and 10 Spans are available to a maximum frequency of 500 Hz; 20, 50 and 100 Hz Spans are