Table 1-1 Specifications

IF FREQUENCY

Range: 45 to 190MHz, in eight 20MHz ranges centred on 50, 70 and 90MHz for 70MHz mode, and 100, 120, 140, 160, and 180MHz for 140MHz mode. LED's indicate 70 or 140MHz mode. Vernier provides continuous adjustment of ±0.5MHz, nominally.
Scale Accuracy: ±0.5MHz, 70MHz mode;
±1.0MHz, 140MHz mode.
Stability: ±100kHz, 45 to 95MHz;
±200kHz, 90 to 190MHz.
(per 5 hr period after ½hr warm-up in stable ambient temperature).

IF OUTPUT LEVEL

Range: −91 to +11dBm (by 1dB step attenuator). Vernier provides continuous adjustment of not less than ±2dB.
Accuracy: ±0.5dB at 0dBm;
±0.2dB per 10dB step above or below 0dBm.
Flatness: 0.1dB at 0dBm with SLOPE control in CAL position, at end of standard length of cable;
0.03dB, nominally, at all other levels using SLOPE control to compensate for attenuator flatness.
SLOPE Control: compensates for external cabling between 3711A and 3712A. LED lights when out of CAL position. Over max sweep width, this control nominally provides −0.1dB, −ve slope, and +0.25dB, +ve slope.
Harmonics: >32dB below fundamental, IF <170MHz;
>30dB below fundamental, IF >170MHz;
(at +11dBm output).
Non-harmonic Spurious: >40dB below fundamental.
Impedance: 75Ω.
Return Loss: >30dB, ≤−0dBm
>28dB, ≥+0dBm

IF SWEEP WIDTH

Range: 0 to 50MHz for 70MHz mode;
0 to 100MHz for 140MHz mode;
in two 5MHz ranges (0 to 5, and 5 to 10MHz) and five 20MHz ranges (0 to 20, 20 to 40, 40 to 60, 60 to 80, and 80 to 100MHz).
Accuracy: ±5% or 0.5MHz, whichever is greater, using Opt, Int, or Line sweep rates;
±10% or 0.5MHz, whichever is greater, using EXT SWEEP INPUT.
Auto Reduction: sweep width reduces by 2 x BB frequency ±10%, when BB frequency >1MHz.
Out of Range: LED illuminates when centre frequency or swept IF lies outwith 45 to 95MHz or 90 to 190MHz ranges.

IF TEST TONE DEVIATION

Test Tone Frequency: accepts BB tone from 3791B BB Transmitter in the range 80kHz to 15MHz.
Deviation Range: 0.5 to 500kHz, in three ranges.
Accuracy: ±5%, 100 to 500kHz;
±12%, 10 to 100kHz;

AUXILIARY IF OUTPUT

Specifications as for main IF OUTPUT, except:
Level: >−10dBm.
Flatness: 1dB.
Return Loss: >28dB, typical.

XTAL OUTPUT

Frequency: 70 or 140MHz, depending on mode.
Accuracy: ±30 ppm.
Level: +5dBm ±1.5dB.
Harmonics: >28dB below fundamental.
Non-harmonic Spurious: > 50dB below fundamental, 45 to 190MHz.
Intrinsic Noise: 2pWOp, typical.
Impedance: 75 Ω.
Return Loss: > 26dB, typically.

SWEEP OUTPUT

Frequency: INT: 70 ±3Hz.
LINE: locked to line frequency.
OPT: selectable between 18 and 100Hz by internal adjustment; normally set to 33Hz for use with 8501A Storage – Normalizer.
Level: 0 to 25V pk-pk into 10kΩ.
Harmonics: >45dB below fundamental.

EXT BB INPUT

Frequency: 80kHz to 15MHz.
Level: −10dBm maintains system calibration.
Impedance: 75Ω.
Return Loss: >30dB.

IMPEDANCE CONVERTER

Option 004 and 005
Frequency: 18 to 100Hz and 80kHz to 10MHz.
Conversion Factor: 1 : 1 ±0.2dB, 80kHz to 10MHz;
1 : 1 ±0.5dB, 18 to 100Hz.
Return Loss: >26dB input and output.
Balance: 3%, 80kHz to 10MHz;
1%, 18 to 100Hz.

GENERAL

Voltage Ranges	100, 120, 220, 240V
Tolerances	+5, −10%
Consumption	150VA max
Frequency	48 to 66Hz
Operating Temperature	0° to 50°C
Storage Temperature	−40° to 65°C
Net Weight	16kg (35lb)
Shipping Weight	*28kg (58lb)
*with plug-in	
Width	425mm (16.75 in)
Height	172mm (6.75 in)
Depth	457mm (18 in)