Table 1-1. Specifications for Model 8755C

SPECIFICATIONS

Function: Plug-in for 180 "T"-series display mainframe. Has three input circuits (R, A, B) which process the 11664A/B/C Detector or 11666A/B Reflectometer Bridge outputs for logarithmic display on the mainframe.

Operating Frequency: 27.8 kHz (typically ±1 kHz)

Modulator Drive: Provides open circuit ±6 V from 75-Ohm source impedance at 27.8 kHz.

Weight: Net, 2.8 kg (6 lb. 4 oz.). Shipping, 4.5 kg (10 lb.)

MODEL 8755C OPERATING WITH MODEL 11664A/B DETECTORS AND MODEL 11665B MODULATOR

Function: A complete instrument for making swept frequency response measurements of return loss, transmission gain or loss, and power.

Frequency Range: 10 MHz to 26.5 GHz.

Measurement Range: Single Detector Signal: ±10 dBm to −50 dBm (noise level).

NOTE

Damage level is +20 dBm (100 mW) RF power and ±10 Vdc.

Ratio of Two Detector Signals: 60 dB.

Frequency Response: Determined by frequency response of detectors and individual test equipment used in any specific measurement.

NOTE

The frequency response error can be eliminated with standard grid line normalization techniques or through the use of the Model 8750A Storage-Normalizer.

Ratio Measurement Accuracy: See table at right:

NOTE

Accuracy figures show overall system uncertainty for a single detector measurement using the OFFSET dB controls. It is also the accuracy of a ratio measurement when the power level to one detector does not change level. If both detectors of a ratio measurement change level, after calibration, the total measurement uncertainty is the sum of the two detector accuracy uncertainties. Figures do not include frequency response, mismatch, or coupler ambiguities.

Ratio Measurement Accuracy

dB Change From Reference	Amplitude Accuracy
10 dB	≤±0.9 dB
20 dB	≤±1.1 dB
30 dB	≤±1.1 dB
40 dB	≤±1.1 dB
50 dB	≤±1.1 dB
60 dB	≤±1.9 dB

GENERAL

Resolution: Independent for each channel in steps of 10, 5, 1, or 0.25 dB per division. With Model 182T display, resolution is 1.29 cm/division and with Model 180T/TR display, resolution is 1 cm/division.

Offset: ±99 dB in 1-dB steps. Each display channel is independent.

Recorder Outputs: 0.5 V/division with nominally 100 Ohms output impedance. (Option 807 must be installed in 180A/AR/C/D, 181A/AR, 182A/C, and 184A/B mainframes).

Marking and Blanking: 180 "T"-series mainframes and 180 series Option 807 mainframes accept both positive and negative 5 Volt marker and blanking inputs. Damage level is 20 V p-p.

Temperature Range: Operation, 0 to 55 degrees C; storage, −40 degress C to +75 degrees C.

Dimensions:

With 182 series display mainframe:
338.1 H x 201.6 W x 498.5 mm D overall (13 15/16" x 7 15/16" x 19 5/8").

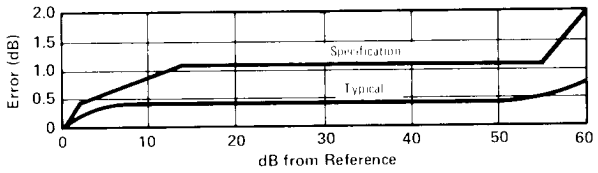
With 180AR/C/T/TR, 181AR/TR, or 184B display mainframe:
133 H x 425 W x 543 mm D overall (5 7/32" x 16 3/4" x 21 3/8"); 493 mm (18 3/8") D behind rack mount tabs.

With 180A/C, 181A/T, or 184A display mainframe:
289 H x 200 W x 540 mm D behind panel (11 3/8" x 7 7/8" x 21 1/4").

Table 1-2. Supplemental Characteristics of Model 8755C

SUPPLEMENTAL CHARACTERISTICS

Ratio Measurement Accuracy:



Accuracy curve shows overall system uncertainty for a single detector measurement using the OFFSET dB controls; it is also the accuracy of a ratio measurement when the power level to one detector does not change level. If both detectors of a ratio measurement change level, after calibration, the total measurement uncertainty is the sum of the two detector accuracy uncertainties. Curve does not include frequency response, mismatch, or coupler ambiguities. The curve requires a calibration power level at +10 dBm incident at the test detector when the 0 dB reference is set.

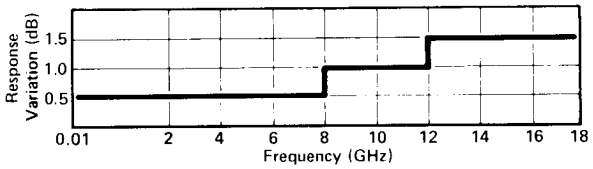
Table 1-3. Supplemental Characteristics of the Model 11664A/B Detectors and the Model 11666A Reflectometer Bridge

HP 11664A DETECTOR

Frequency Range: 10 MHz to 18 GHz.

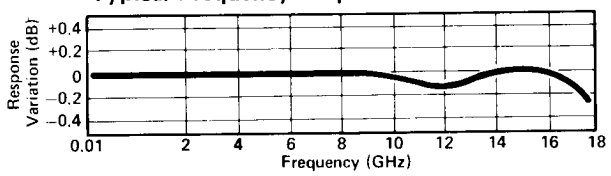
Maximum Input Power: Damage level is +20 dBm (100 mW), ±10V dc.

Tracking Between Two 11664A Detectors:



(Tracking between 2 detectors at the same relative power level. This does not include mismatch or coupler uncertainties.).

Typical Frequency Response:



HP 11664B DETECTOR

Frequency Range: 10 MHz to 26.5 GHz.

Maximum Input Power: Damage level is +20 dBm (100 mW), ±10 V dc.

Tracking Between Two 11664B Detectors: Tracking between two detectors at the same power level is typically <2 dB from 10 MHz to 26.5 GHz. For detectors 50 dB apart in power level, tracking is typically <5 dB from 18 to 26.5 GHz and <3 dB from 12 to 18 GHz.

HP 11666A REFLECTOMETER BRIDGE

Frequency Range: 40 MHz to 18 GHz.

Maximum Input Power: Damage level is +15 dBm (31.6 mW), ±10 V dc.

Frequency Tracking:

Between incident and reflected arms: ≤3.2 dB.

Between incident and test port, including 1.1 dB from HP 11664A/B detector: ≤4.2 dB.