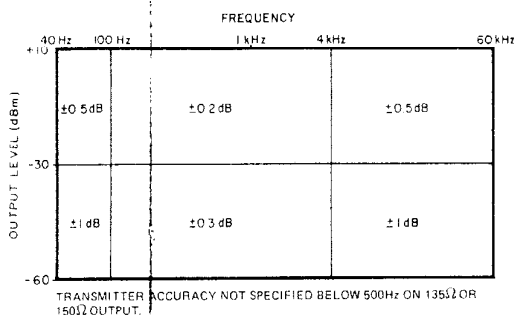


Specifications, Model 3551A & 3552A

Receiver

Level Measurements

Frequency range: 40 Hz to 60 kHz.
Dynamic range: +15 dBm to -70 dBm.
Resolution: 0.1 dB.
Sample rate: 10/second normal, 2/second damped.
Detector type: average responding.
Accuracy: at 25°C $\pm 10^\circ\text{C}$, temperature coefficient: ± 0.005 dB/ $^\circ\text{C}$ beyond this range.

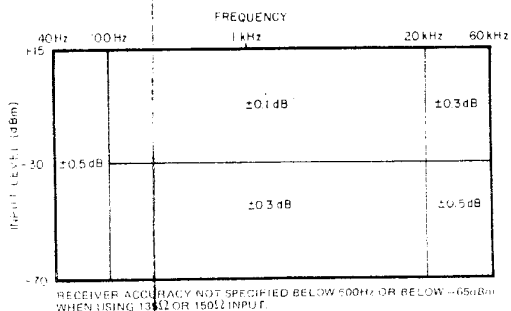


Frequency measurements

Frequency range: 40 Hz to 60 kHz.
Dynamic range: +15 dBm to -70 dBm.
Resolution: 1 Hz (40 Hz to 10 kHz), 10 Hz (10 kHz to 60 kHz).
Sample rate: 10 second normal, 2/second damped.
Accuracy: ± 1 count.

Transmitter 3551A & 3552A

Frequency range: 40 Hz to 60 kHz.
Ranges: 40 Hz to 1 kHz, 200 Hz to 6 kHz, 2 kHz to 60 kHz, 800 Hz fixed. (Other frequencies available 3552A.) 1004 Hz fixed, 3551A.
Resolution: 1 Hz (40 Hz to 10 kHz), 10 Hz (10 kHz to 60 kHz).
Sample rate: 10/second.
Harmonic distortion: < -50 dB (THD 100 Hz to 4 kHz); < -40 dB (THD 40 Hz to 100 Hz and 4 kHz to 20 kHz); < -30 dB (THD 20 kHz to 60 kHz); < -55 dB (all harmonics 100 Hz to 4 kHz); < -60 dB (THD 1004 Hz fixed).
Accuracy: ± 1 count.
Level range: +10 dBm to -60 dBm (40 Hz to 60 kHz), +6 dBm to -60 dBm. (1004 Hz fixed—3551A; 800 Hz fixed—3552A).
Resolution: 0.1 dB.
Sample rate: 10/second.
Accuracy: at 25°C $\pm 10^\circ\text{C}$, temperature coefficient: ± 0.005 dB/ $^\circ\text{C}$ beyond this range.



3551A Noise measurements

Dynamic range

Message circuit noise: 0 dBm to +85 dBm.
Noise-with-tone: 10 dBm to +85 dBm.
Noise-to-ground: 40 dBm to +125 dBm.
Resolution: 1 dB.
Sample rate: 2/second.
Detector type: Quasi-RMS responding.

Accuracy

Message circuit noise: ± 1 dB (+20 dBm to +85 dBm), ± 2 dB (0 dBm to +20 dBm).
Noise-with-tone: ± 1 dB (+20 dBm to +85 dBm), ± 2 dB (+10 dBm to +20 dBm).
Noise-to-ground: ± 1 dB (+60 dBm to +125 dBm), ± 2 dB (+40 dBm to +60 dBm).
Weighting filters: C-message, 3 kHz flat, 15 kHz flat, program.

3552A Noise measurements

Dynamic range

Message circuit noise: -90 dBm to -5 dBm.
Noise-with-tone: -80 dBm to -5 dBm.
Noise-to-ground: -50 dBm to +35 dBm.
Resolution: 1 dB.
Sample rate: 2/second.
Detector type: Quasi-RMS responding.

Accuracy

Message circuit noise: ± 1 dB (-70 dBm to -5 dBm), ± 2 dB (-90 dBm to -70 dBm).
Noise-with-tone: ± 1 dB (-70 dBm to -5 dBm), ± 2 dB (-80 dBm to -70 dBm).
Noise-to-ground: ± 1 dB (-30 dBm to +35 dBm), ± 2 dB (-50 dBm to -30 dBm).
Weighting filters: Telephone (CCITT Psophometric), 3 kHz flat, 15 kHz flat, Programme.

General

Monitor: built-in speaker, monitors received or transmitted signal.
Balanced impedances: 135 Ω , 600 Ω , 900 Ω (3551A).
Balanced impedances: 150 Ω , 600 Ω , 900 Ω (3552A).
Bridging loss: < 0.2 dB.
Return loss: > 30 dB.
Longitudinal balance: > 60 dB at 6 kHz, > 126 dB at 50 Hz.
Hold circuit: 20 milliamps constant current, < 0.2 dB holding loss, resistive fuse protection.
Input/output protection: blocks 300 V dc.
Maximum longitudinal voltage: 200 V rms.
Battery supply: > 4 hours continuous operation on internal rechargeable batteries at 25°C. Battery drain is automatically turned off when discharged below proper operating level. Complete recharge in 12 hours.
Power requirements: 100 V, 120 V, 220 V, 240 V $\pm 10\%$; 48 Hz to 440 Hz; 4 VA.
Temperature range: 0°C to 55°C, operating; -20°C to +66°C storage.
Relative humidity: 0 to 95% ($< 40^\circ\text{C}$).
Dimensions: 133 mm H \times 343 mm W \times 254 mm D (5 $\frac{1}{4}$ " \times 13 $\frac{1}{2}$ " \times 10").
Weight: net, 6.6 kg (14.5 lb). Shipping, 7.3 kg (16 lb).

Options

C01-3551A, C01-3552A: 19 inch rack mount, ac power only (no batteries)
H10-3551A: Extends frequency range to 85 kHz

Ordering information

3551A Transmission test set
3552A Transmission set (CCITT)