ANALOG SIGNAL OUTPUTS
Low Distortion Sine Wave
Frequency Range 10 to 120 kHz
Frequency Accuracy ±0.5%
Amplitude Range (20 Hz to 30 kHz)
Balanced +0.25 mV to 26.25 Vrms (-70 dBu to +30.6 dBu)
Unbalanced +0.25 mV to 13.12 Vrms (-70 dBu to +24.6 dBu)
Amplitude Accuracy ±0.2 dB (±3.3 %) at 1 kHz
Amplitude Resolution 0.01 dB
Flatness (1 kHz RT) 10–20 kHz ±0.05 dB
Stability THD+N
25–20 kHz ≤(0.0025% + 3 µV), 80 kHz BW 1–92 dB
Square Wave
Frequency Range 20–10 Hz
Amplitude Range Balanced 0.71 µp to 34.73 Vpp
Unbalanced 0.71 µp to 17.36 Vpp
Amplitude Accuracy ±0.2 dB (±3.3 %) at 400 Hz
rise/fall time Typically 2.5–3.0 µs
SMpte (or DIN) Test Signals with option “ATS-IMD”
LT Tone 50, 50, 70, or 250; all ±1.0 %
HT Tone Range ±2 ± 8 kHz or 8 kHz
RMS Level ±41 (LT-HT)
Residual IMD 0.0015% (±46.5 dB), 60 Hz ± 7 kHz or 250 Hz ± 8 kHz
OUTPUT CHARACTERISTICS
Source Configuration Selectable balanced or unbalanced
Source Impedances Balanced (each side) 50 Ω (±3 %), 150 Ω (±2 %), or 600 Ω (±2 %)
Unbalanced 50 Ω (±2 %)
Output Current Limit 75 mA (±3 %)
Max Power Output Balanced +29.8 dBm into 600 Ω (±50 %)
Unbalanced +23.8 dBm into 600 Ω (±50 %)
Output Related Crosstalk (10–20 Hz) ≤10 dB or 10 µV, whichever is greater
WIDEBAND AMPLITUDE/NOISE FUNCTION
Measurement Range +10 Vrms to 140 Vrms [–118 dBu to +45 dBu]
Accuracy (1 kHz) ±0.2 dB (±27.7 µV) unweighted
Flatness (1 kHz RT) 223 ±0.05 dB (±60 Hz–20 kHz)
Bandlimiting Filters Lf–3 dB ±0.05 dB (±60 Hz–20 kHz)
Unbalanced ±0.4±20 kHz
Amplitude ±0.0±kHz
High pass Filters 22 Hz, 400 Hz, 2-pole Butterworth
Low pass Filters 15 kHz, 20 kHz 2-pole elliptic low-pass
Weighting Filters ANSI-TEL, “A” weighting; CCIR 468
THD+N Measurements
Frequency Range ±0.04% to ±0.4% of sample rate
Input Sample Rate 10–19.2 kHz at 48.0 kHz (±0.1 %)
Display Power 10, 19 or 49 dBm (±5.3 dB)
DIGITAL INTERFACE MEASUREMENTS
AES/EBU Impairments, Real Time Displays
Input Sample Rate ±0.0001% [±1 PPM] internal ref
Input to Reference Delay Measures status propagation from the AES/EBU input to the input. Range is 0–192 (frames), resolution ±6 ns
AES/EBU Input Voltage (500 Hz) ±200 mV ±10% +500 mV ±10% ±250 mV ±10% ±200 mV ±10%
Jitter Flatness ±1.5 % ±10% 0.002 % ±10% ±2 % ±10% ±2 % ±10% ±2 % ±10%
Spectral Jitter Products ±0.0002 % (±12 µHz) or ±0.001 % (±0.1 fs) or ±0.0001 % (±100 fs)
Channel Status Bits English language decoded
CHANNEL STATUS BITS
Channel Error Bits English language decoded
Parity Error Bit Error Bit
BITE TEST Measurement
Model Compatible with random mode of Audio Precision BITE Test
AUXILIARY SIGNALS
Generator Analog Synch Output; Digital Sync Output; Analyzer Input Monitor; Analyzer Reading
AUDIO MONITOR
Power Output Typically 1 watt
GENERAL / ENVIRONMENTAL
Power Requirements 100/120V/230/240 Vac (–10%/+5%), 50–60 Hz, 50 mA max
Temperature Range 0 °C to +50 °C, operating; –20 °C to +60 °C, storage
Humidity 90% RH, with at least 40% (+40°C)
DIN Compatibility with IEC/1394; TCR 22 (class B), and FCC 15 subpart 3 (class B)
Dimensions 16.5 x 6.0 x 13.6 inches [41.9 x 15.2 x 34.5 cm]
Weight Approximately 40 lbs [18.1 kg]
Safeguards Compliant with 93/46/EEC, EN61010, and IEC 1010 (including Amendments 1 and 2)
Complete ATS-1 specifications are downloadable from the Products area of the Audio Precision Web site at audioprecision.com.