



## SOLAR MODEL 8850-2 200 Watt HIGH POWER SWEEP GENERATOR

for  
conducted audio frequency  
susceptibility testing

### APPLICATION

The **Model 8850-2** 200 watt High Power Sweep Generator was specifically designed for use with the Solar Audio Isolation Transformers in making audio frequency susceptibility test as required by Mil-Std-461E/F CS101. This high power unit is especially suited for rapidly making tests in the shielded room.

When used with the **Type 6220-1A** or **6220-2** Audio Isolation Transformer, the combination enable the injection of sinewave audio voltages into active power lines supplying power to Equipment Under Test (EUT).

### DESCRIPTION

The Model 8850-2 Power Sweep Generator provides audio power in a manually tuned or sweeping mode for four frequency bands covering 30 Hz to 150 KHz. The sweep rate is compliant with the requirements of Mil-Std-461F for an analog scan, approximately 0.0333 x frequency of oscillation per second.

The frequency in kHz and output level in volts r.m.s are continuously displayed on two digital front panel meters.

When used in conjunction with the Type 7021-1 Phase Shift Network and the Type 6220-1A Audio Isolation Transformer, provision is made for sensing the audio voltage being injected into the EUT and displaying it on the digital panel meter. In this arrangement, the unit maintains a constant injection level (up to a maximum of 7.5 volts r.m.s ) as the frequency is scanned to 50 kHz.

### SPECIFICATIONS

- Frequency Range:** . . . . . 30 Hz to 150 KHz in four bands
- Frequency Stability:** . . . . . <2250 ppm/C
- Output Power:** . . . . . 200 watt into 2.0 Ω non-inductive
- Output Impedance:** . . . . . 2.0 Ω
- Output Voltage:** . . . . . ≥20 volts RMS into 2.0 Ω non-inductive
- Output Current:** . . . . . 15 amps maximum at 1 kHz
- Output Level:** . . . . . Manually controlled by panel knob. Continuously displayed on digital panel meter.
- Sweep Duration:** . . . . . 0.0333 x frequency of oscillation per sec.
- Remote Sense:** Automatically maintains output voltage at the level set by operator up to 7.5 V.r.m.s. as frequency is scanned to 50 kHz
- Output Level Drift:** . . . . . Less than 0.5%
- Overload Protection:** . . . . . Automatic shut down for excess temperature, over-voltage, or over-current conditions in output circuit.

### Power Requirements

- Power Source . . . . . 115/230 V 60/50 Hz
- Power Line Fuses 115 V . . . . . 12 amperes (2)
- Power Line Fuses 230 V . . . . . 5 amperes (2)

### Physical Dimensions

- Net Weight . . . . . 39 Lbs (17.7 Kg)
- Shipping Weight . . . . . 45 Lbs (20.4 Kg)
- Height . . . . . 9.12 Inches (22.2 cm)
- Width . . . . . 17.12 Inches (43.5 cm)
- Depth . . . . . 13.50 Inches (34.3 cm)

### FEATURES

- Manual or automatic sweep from 30 Hz to 150 kHz.
- Digital display of frequency and output voltage level or injected voltage level.
- Remote sensing of voltage being injected into the Equipment Under Test.
- Automatic leveling of output voltage as frequency is scanned or swept to 50 kHz
- Low Output Impedance for greater transfer of audio power
- Protective circuits prevent damage to output stage caused by power frequency feedback in typical a.c. tests setups.
- Up to 200 watts output into 2.0 ohm resistive load

### AVAILABLE ACCESSORIES

- SOLAR Type 6220-1A Audio Isolation Transformer**  
Use for injecting output of 8850-21 in series with the power line to test sample as required by test method CS101, Mil-Std-461E/F
- SOLAR Type 7032-1 Isolation Transformer**  
Use for removing power ground from the case of scope or voltmeter.
- SOLAR Type 8810-1 Impedance Matching Transformer**  
Plugs into output terminals to step up the output to 50 ohms impedance. Use when 50 ohm signal source is needed.
- SOLAR Type 8811-1 Wide Range Transformer**  
Plugs into output terminals to provide up to 115 volts rms at 200 watts. Use as a power source for frequencies from 30 Hz to 2 kHz.
- SOLAR Type 9138-1 Step-up Transformer**  
Plugs into output terminals to provide up to 2 KV into 20 kilo-ohms load, 3 kHz to 30 kHz.