The Model 350AH1 amplifier is a portable, self-contained, air-cooled, broadband, solid state amplifier unit designed for laboratory applications where instantaneous bandwidth, high gain and moderate power output are required. When used with an RF sweep generator, the 350AH1 will provide up to 350 watts of output power.

Housed in a stylish contemporary enclosure, the unit provides instantaneous power for typical applications such as magnetic susceptibility testing, 4–10 kHz requirement of CS114 of MIL-Std-461F, antenna and component testing, Watt-meter calibration and as a driver for higher power amplifiers. The 350AH1 is powered by a high efficiency switching supply, with autoranging AC input circuitry which will automatically accept voltages from 90 to 260 VAC in the 47 to 63 Hz frequency range. The RF amplifier stages are protected from over-temperature and over-current conditions by removing the DC voltage to them when a fault is detected. The digital display on the front panel indicates the operational status and any pending fault conditions when an over-temperature, over-current or power supply fault has occurred. The unit can be returned to normal operation when the condition has been cleared. The unit also includes digital control for both local and remote control of the amplifier. The RISC microprocessor controller board provides IEEE-488 (GPIB), USB, Ethernet and asynchronous full duplex RS-232 communication control of all amplifier functions.

Two 350AH1 amplifiers may be used together in a “bridged” output configuration by supplying the same signal to both amplifiers and using the internal signal inversion feature of one amplifier. The amplifier output grounds are connected and the load is placed across the two amplifier outputs.
SPECIFICATIONS, MODEL 350AH1

OPERATION ........................................................................... Class AB Linear

FREQUENCY RESPONSE .................................................. 10Hz–1 MHz instantaneously

POWER OUTPUT (1.79 Ohm load)

• CW, Minimum ................................................................. 350 watts, 10Hz–300kHz
  350–55 watts, 300kHz–1MHz

• Voltage Output, Minimum ........................................... 25 Vrms, 10Hz–300kHz
  25–10 Vrms, 300kHz–1MHz

• Current Output, Minimum ........................................... 14 Arms, 10Hz–300kHz
  14–5.5 Arms, 300kHz–1MHz

FLATNESS ........................................................................... ± 1.0 dB, 10Hz–300kHz

• ± 4.0 dB, 300kHz–1MHz

GAIN (POWER) ...............................................................

• 47 dB minimum, 10Hz–300kHz
  39 dB minimum, 300kHz–1MHz

GAIN CONTROL RANGE .................................................. 15 dB minimum

INPUT SIGNAL ............................................................... 0–2 Vrms

INPUT IMPEDANCE ........................................................... 600 ohms typical

OUTPUT IMPEDANCE .......................................................... < 1Ω typical

MISMATCH TOLERANCE .................................................. 100% of rated power without fail.

MODULATION CAPABILITY ...........................................

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal

PRIMARY POWER ..........................................................

90–260 VAC

47 to 63 Hz, single phase, 1200 watts maximum

CONNECTORS

• RF INPUT ............................................................... Type BNC female
• RF OUTPUT ........................................................... 5-way binding posts
• IEEE-488 ............................................................. 24 pin female
• RS-232 ............................................................... 9 pin subminiature D (female)
• USB .................................................................... Type B (female)
• Ethernet .............................................................. RJ-45

REMOTE INTERLOCK .......................................................

15 pin subminiature D

COOLING .......................................................................

Forced air (self contained fans)

MODEL CONFIGURATIONS

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>RF CONNECTOR LOCATION</th>
<th>INSTRUMENT CASE</th>
<th>WEIGHT</th>
<th>SIZE (W x H x D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>350AH1</td>
<td>Front Panel</td>
<td>Yes</td>
<td>25 kg</td>
<td>50.3 x 19.9 x 37.6 cm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19.8 x 7.85 x 14.8 in</td>
</tr>
<tr>
<td>350AH1M1</td>
<td>Rear Panel</td>
<td>No</td>
<td>18.2 kg</td>
<td>48.3 x 17.8 x 37.6 cm</td>
</tr>
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<td></td>
<td></td>
<td>19.0 x 7.0 x 14.8 in</td>
</tr>
<tr>
<td>350AH1M2</td>
<td>Rear Panel</td>
<td>Yes</td>
<td>25 kg</td>
<td>50.3 x 19.9 x 37.6 cm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19.8 x 7.85 x 14.8 in</td>
</tr>
<tr>
<td>350AH1M3</td>
<td>Front Panel</td>
<td>No</td>
<td>18.2 kg</td>
<td>48.3 x 17.8 x 37.6 cm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19.0 x 7.0 x 14.8 in</td>
</tr>
</tbody>
</table>