The Model 350S1G4 is a portable, self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 350S1G4, when used with a sweep generator, will provide a minimum of 350 watts of RF power.

The Model 350S1G4 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a graphic liquid crystal display, menu assigned softkeys, a single rotary knob, and four dedicated switches (POWER, STANDBY, OPERATE and FAULT/RESET) to offer extensive control and status reporting capability. The display provides operational presentation of Forward Power and Reflected Power plus control status and reports of internal amplifier status. Special features include a gain control and RF output level protection.

All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS-232 hardwire and fiber optic, USB, and Ethernet. The bus interface connector is located on the back panel and positive control of local or remote operation is assured by a Local/Remote switch on the front panel of the amplifier.

The low level of spurious signals and linearity of the Model 350S1G4 make it ideal for use as a driver amplifier in testing wireless and communication components and subsystems. It can be used as a test instrument covering multiple frequency bands and is suitable for a variety of communication technologies such as CDMA, W-CDMA, TDMA, GSM etc. It is also suitable for EMC Test applications where undistorted modulation envelopes are desired.

The 350S1G4 is housed in a single equipment rack and is designed to provide complete standalone performance for RF testing. It is also configured to be used as a sub-amplifier in a 600-watt, 900-watt, or 1200-watt higher power amplifier. It can be added to in an incremental fashion to become a part of these higher power units, yet still be used as a standalone 350 watt amplifier.
SPECIFICATIONS, MODEL 350S1G4

RATED OUTPUT POWER ............................................... 350 watts minimum

INPUT FOR RATED OUTPUT........................................... 1.0 milliwatt maximum

POWER OUTPUT @ 3dB COMPRESSION
  Nominal......................................................... 375 watts
  Minimum...................................................... 320 watts

POWER OUTPUT @ 1dB COMPRESSION
  Nominal......................................................... 325 watts
  Minimum...................................................... 270 watts

FLATNESS............................................................. ±2.0 dB typical
                                                  ±2.5 dB maximum

FREQUENCY RESPONSE ............................................... 0.8-4.2GHz instantaneously

GAIN (at maximum setting) ........................................ 55.5 dB minimum

GAIN ADJUSTMENT .................................................. 15 dB minimum

INPUT IMPEDANCE .................................................. 50 ohms, VSWR 2.0:1 maximum

OUTPUT IMPEDANCE................................................ 50 ohms nominal

MISMATCH TOLERANCE* ............................................ 100% of rated power without foldback. Will operate without damage or oscillation
                                                        with any magnitude and phase of source and load impedance.
                                                        *See Application Note #27

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

HARMONIC DISTORTION............................................ Minus 20 dBc maximum at 325 watts

THIRD ORDER INTERCEPT POINT................................. 65 dBm typical

RF POWER DISPLAY ................................................ Digital, forward and reflected

PRIMARY POWER ..................................................... 120-240VAC
                                                        50/60 Hz, single phase
                                                        1900 watts

CONNECTORS
RF Connectors ..................................................... See Model Configurations
Safety interlock .................................................. 15 pin female subminiature D on rear panel
Remote computer interface .................................... IEEE-488 (GPIB)& RS-232 connector on rear panel
Remote Computer Interface (Fiber Optic) ................... ST Conn Tx and Rx RS-232
Operate Interface................................................ RJ-11 on rear panel
USB 2.0............................................................. Type B
Ethernet........................................................... RJ-45

IEEE-488 (GPIB) INTERFACE & RS-232 .................... Allows control and monitoring of all front panel controls except keylock position
                                                        control

COOLING .............................................................. Forced air (self contained fans)

<table>
<thead>
<tr>
<th>MODEL #</th>
<th>RF INPUT</th>
<th>RF OUTPUT</th>
<th>WEIGHT</th>
<th>SIZE (W x H x D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>350S1G4</td>
<td>Type N female on</td>
<td>Type 7/16 female</td>
<td>86.2 kg (190</td>
<td>50.3 x 55.9 x 61 cm</td>
</tr>
<tr>
<td></td>
<td>front panel</td>
<td>on front panel</td>
<td>lbs)</td>
<td>19.8 x 22 x 24 in</td>
</tr>
<tr>
<td>350S1G4M1</td>
<td>Type N female on</td>
<td>Type 7/16 female</td>
<td>86.2 kg (190</td>
<td>50.3 x 55.9 x 61 cm</td>
</tr>
<tr>
<td></td>
<td>rear panel</td>
<td>on rear panel</td>
<td>lbs)</td>
<td>19.8 x 22 x 24 in</td>
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<tr>
<td>350S1G4M2</td>
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<td>Same as standard</td>
<td>68 kg (130</td>
<td>48.3 x 53.3 x 61 cm</td>
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<tr>
<td></td>
<td>with enclosure</td>
<td>with enclosure</td>
<td>lbs)</td>
<td>19 x 21 x 24 in</td>
</tr>
<tr>
<td></td>
<td>removed for rack</td>
<td>removed for rack</td>
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<td></td>
<td>mounting.</td>
<td>mounting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>350S1G4M3</td>
<td>Same as M1 with</td>
<td>Same as M1 with</td>
<td>68 kg (130</td>
<td>48.3 x 53.3 x 61 cm</td>
</tr>
<tr>
<td></td>
<td>enclosure removed</td>
<td>enclosure removed</td>
<td>lbs)</td>
<td>19 x 21 x 24 in</td>
</tr>
</tbody>
</table>