

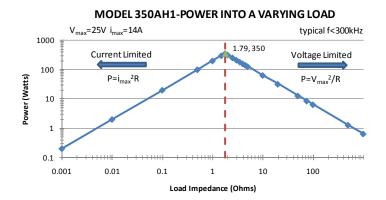
rf/microwave instrumentation

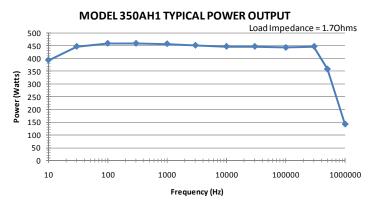
Model 350AH1, M1 through M3 350 Watts CW 10Hz-1MHz

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 RF OUTPUT REMOTE CONTROL IEEE-488	5-way binding posts	
RS-232 USB Ethernet	9 pin subminiature D (female) Type B (female) RJ-45	
REMOTE INTERLOCK	·	
COOLING	Forced air (self contained fans)	

MODEL CONFIGURATIONS

MODEL NUMBER	RF CONNECTOR LOCATION	INSTRUMENT CASE	WEIGHT	SIZE (W x H x D)
350AH1	Front Panel	Yes	25 kg (55.0 lb)	50.3 x 19.9 x 37.6 cm 19.8 x 7.85 x 14.8 in
350AH1M1	Rear Panel	No	18.2 kg (40.0 lb)	48.3 x 17.8 x 37.6 cm 19.0 x 7.0 x 14.8 in
350AH1M2	Rear Panel	Yes	25 kg (55.0 lb)	50.3 x 19.9 x 37.6 cm 19.8 x 7.85 x 14.8 in
350AH1M3	Front Panel	No	18.2 kg (40.0 lb)	48.3 x 17.8 x 37.6 cm 19.0 x 7.0 x 14.8 in