

RF Amplifiers That Are Lighter, Smaller, Use Less Energy, Deliver More Power And Provide A Better Price/Performance Ratio.

You're about to see the most advanced and innovative RF power amplifiers in the world today. Every amp we make represents the latest technology and the ultimate in quality.

Our new "A" series amplifiers are the perfect example.
Maybe We Should Have Called It The A+ Series.

Our new, redesigned "A" Series amplifiers are so powerful and so efficient that we're able to make them 25% to 50% smaller while maintaining the same output power. They're lighter, more portable, and able to fit easily into a control room. Yet they still deliver 500, 1000 and 2500 watts of power, and even more depending on the model you choose. These amps now cover the 10 kHz to 250 MHz frequency range. So you can test to virtually any standards.

But the "A" Series amplifiers are just part of what's new in RF amplifiers. All the latest innovations in the industry are right here.



DC to 1 MHz

RF Amplifiers

“A” Series-Solid State.
DC to 250 MHz.
25 to 16,000 watts.

“W” Series-Solid State.
DC to 1,000 MHz.
1 to 4,000 watts.

The Best-Performing, Most Reliable RF Test Amplifiers. Period.

Our amplifiers perform beyond the norm, beyond expectations, and way beyond the abilities of other test amplifiers. The performance, mismatch capabilities, power, reliability, and the value of AR amplifiers have become legendary.

All our RF Amplifiers have modulation capability that will faithfully reproduce AM, FM or Pulse Modulation appearing on the input signal. The AM peak envelope power is limited to specified power.

Subampability™: (sub-amp-ability). noun:
The ability to use an amplifier individually, or as a building block, upon which power can be added incrementally.

Add Power To Existing Amps.
Many amplifiers within our “A” & “W” Series are designed so that the power can be expanded with a relatively simple upgrade. Of course, the amplifiers can still be used individually when needed.



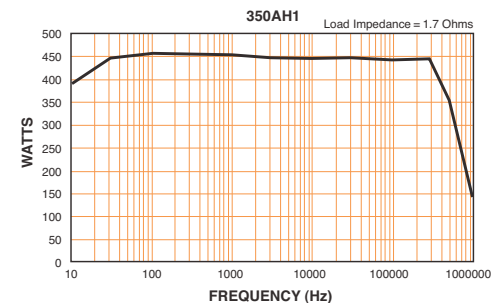
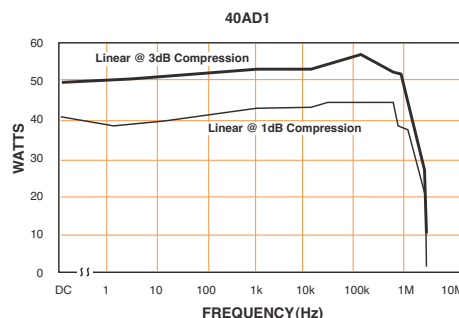
40 watts CW. dc - 1 MHz.

Rated Output Power	40 watts
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Typ. 50 watts / Min. 40 watts	
Power Output @ 1dB compression	
Typ. 40 watts / Min. 25 watts	
Flatness	±1.5 dB max.
Frequency Response	dc - 1 MHz instantaneously
Gain (at max. setting)	45 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*	
100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 25 dBc max. at 25 watts
Third Order Intercept Point	54 dBm typ.
Primary Power (user must specify)	
90 - 135 / 180 - 270 VAC	
50 / 60 Hz, single phase, autoranging 400 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Cooling	Forced air (self contained fans)
Weight	16 kg (35 lb)
Size (WxHxD)	50.3 x 15.5 x 30 cm / 19.8 x 6.1 x 11.8 in



350 watts CW. 10 Hz - 1 MHz.

Operation	Class AB Linear
Power Output (1.79 Ohm load)	
CW, min.	350 watts, 10Hz - 300kHz
Voltage Output, min.	350 - 55 watts, 300kHz - 1MHz
Current Output, min.	25 Vrms, 10Hz - 300kHz
Flatness	25 - 10 Vrms, 300kHz - 1MHz
±1.0 dB, 10Hz - 300kHz	14 Arms, 10Hz - 300kHz
±4.0 dB, 300kHz - 1MHz	14 - 5.5 Arms, 300kHz - 1MHz
Frequency Response	10 Hz - 1 MHz instantaneously
Input Signal	0 - 2 Vrms
Gain (Power)	47 dB min., 10Hz - 300kHz
39 dB min., 300kHz - 1MHz	
Gain Control Range	15 dB min.
Input Impedance	600 ohms typ.
Output Impedance	< 1Ω typ.
Mismatch Tolerance	100% of rated power without fail
Primary Power	90 - 260 VAC
	47 - 63 Hz, single phase, 1200 watts max.
Connectors	
RF Input	Type BNC female on front panel
RF Output	5-way binding posts on front panel
Remote Control	
IEEE-488	24 pin female
RS-232	9 pin subminiature D female
USB	Type B female
Ethernet	RJ-45
Safety Interlock	15 pin subminiature D
Cooling	Forced air (self contained fans)
Weight	25 kg (55 lb)
Size (WxHxD)	
50.3 x 19.9 x 37.6 cm / 19.8 x 7.85 x 14.8 in	



* See Application Note #27A at www.arww-rfmicro.com/appnote27/



10WD1000

10 watts CW. dc -1000 MHz.

Rated Output Power 15 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 19 watts / Min. 12.5 watts
Power Output @ 1dB compression
 Nominal 17 watts / Min. 10 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response
 DC - 1000 MHz (In two bands selected automatically, manually or buss)
Gain 40 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
 100% of rated output power. Will operate without damage or oscillation or foldback with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 10 watts
Third Order Intercept Point 50 dBm typ.
Primary Power
 85 - 264 VAC
 47 - 440 Hz, 500 watts max.
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
Remote Interfaces
 IEEE-488 24 pin female
 RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 20.5 kg (45 lb)
Size (WxHxD)
 50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in



50WD1000

50 watts CW. dc -1000 MHz.

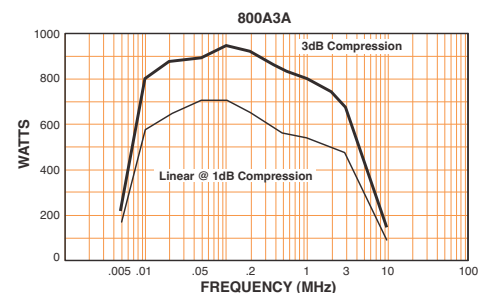
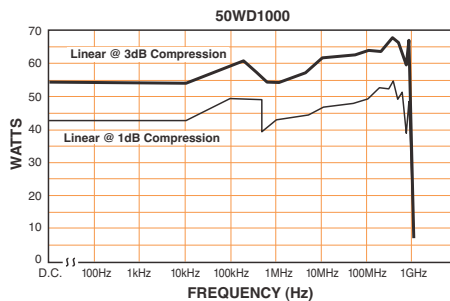
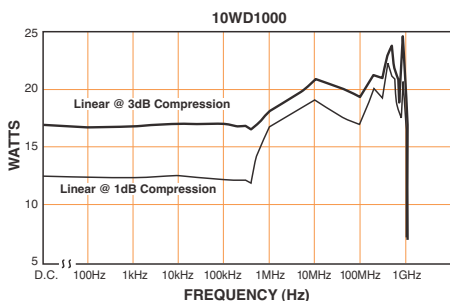
Rated Output Power 50 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 60 watts / Min. 40 watts
Power Output @ 1dB compression
 Nominal 50 watts / Min. 30 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response
 DC - 1000 MHz (in two bands selected automatically or manually)
Gain 47 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
 100% of rated output power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 35 watts
Third Order Intercept Point 56 dBm typ.
Primary Power
 90 - 132; 180 - 264 VAC
 50 / 60 Hz, single phase, 700 watts max.
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
Remote Control 25 Pin Subminiature D on rear panel
Cooling Forced air (self contained fans)
Weight 29 kg (64 lb)
Size (WxHxD)
 50.3 cm x 24.9 cm x 45.7 cm / 19.8 in x 9.8 in x 18 in



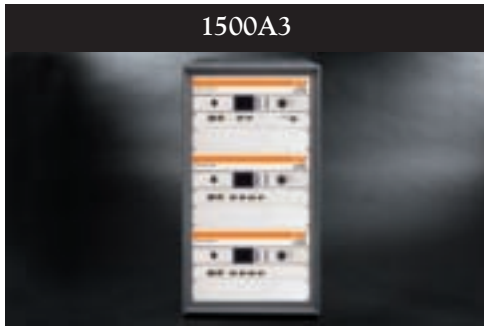
800A3A

800 watts CW. 10 kHz -3 MHz.

Rated Output Power 800 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 800 watts Min. 700 watts, 10 kHz - 2 MHz
 Min. 600 watts, 2 - 3 MHz
Power Output @ 1dB compression
 Nominal 500 watts / Min. 400 watts
Flatness ± 1.0 dB max.
Frequency Response 10 kHz - 3 MHz instantaneously
Gain (at max. setting) 60 dB min.
Gain Adjustment (continuous range) 23 dB min.
Input Impedance 50 ohms, nominal
Output Impedance (switch select; manual)
 12.5, 25, 50, 100, 150, 200, 400 ohms nominal
 (10 kHz - 3 MHz) on front panel
Mismatch Tolerance*
 Will operate without damage or oscillation with any magnitude and phase of source and load impedance. 100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 400 watts reflected power.
Harmonic Distortion
 Minus 20 dBc max. at 400 watts power output
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
 Remote Control
 IEEE-488/RS-232, USB ability to remote control and power an external impedance transformer.
RF Power Display
 0 - 1000 watts full scale. Directional power monitor allows separate display of forward and reflected power.
Power Monitor
 BNC: 0 - 10V forward and reverse power
Cooling Forced air (self contained fans)
Primary Power Universal, 85 - 137 / 180 - 300 VAC,
 47 - 63 Hz, 2500 watts max.
Weight (max.) 36.4 kg (80 lb)
Size (WxHxD)
 50.3 x 34 x 55.1 cm / 19.8 x 13.4 x 21.7 in
 For external impedance transformer options, see specification sheet for IT2000 Series impedance transformers.



10 kHz to 100 MHz



1500 watts CW. 10 kHz-3 MHz.

Rated Output Power 1500 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 1500 watts / Min. 1400 watts
Power Output @ 1dB compression
 Nominal 1000 watts / Min. 800 watts
Flatness ± 1.0 dB max.
Frequency Response 10 kHz - 3 MHz instantaneously
Gain (at max. setting) 63 dB min.
Gain Adjustment (continuous range) 23 dB min.
Input Impedance 50 ohms, nominal
Output Impedance 50 ohms, nominal (10kHz - 3MHz)
Mismatch Tolerance*
 Will operate without damage or oscillation with any magnitude and phase of source and load impedance. 100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 800 watts reflected power.
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
 Remote Control IEEE-488/RS-232, USB ability to remote control and power an external impedance transformer
RF Power Display
 0 - 2000 watts full scale. Directional power monitor allows separate display of forward and reflected power.
Power Monitor
 BNC: 0 - 10V forward and reverse power
Cooling Forced air (self contained fans)
Primary Power Universal, 180 - 275 VAC, 47 - 63Hz, 5000 watts max.
Weight (max.) 136 kg (300 lb)
Size (WxHxD)
 56.1 x 109.2 x 88.9 cm / 22.1 x 43 x 35 in
 For external impedance transformer options, see specification sheet for IT2000 Series impedance transformers.



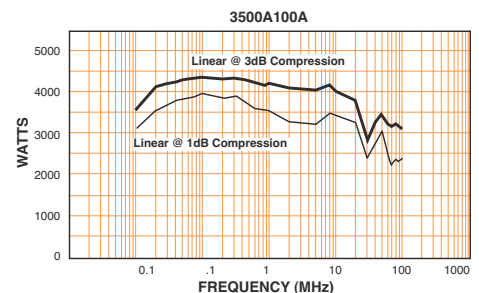
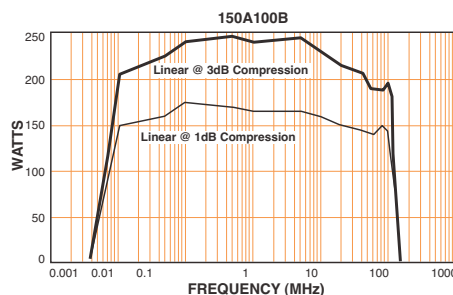
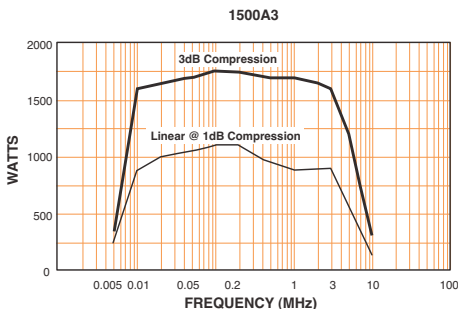
150 watts CW. 10 kHz-100 MHz.

Rated Output Power 150 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 220 watts / Min. 180 watts
Power Output @ 1dB compression
 Nominal 155 watts / Min. 125 watts
Flatness ± 1.5 dB max.
Frequency Response 10 kHz - 100 MHz instantaneously
Gain (at max. setting) 52 dB min.
Gain Adjustment Range 18 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*
 100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Noise Figure (above 1.0 MHz) 6 dB typ.
Harmonic Distortion
 Minus 20 dBc max. at 125 watts
Third Order Intercept Point 58 dBm typ.
Primary Power
 90 - 135 / 180 - 270 VAC auto ranging
 47 - 63Hz, single phase, 1000 watts max.
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
Remote Interfaces
 IEEE-488 24 pin female
 RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 31.75 kg (70 lb)
Size (WxHxD)
 50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in



3500 watts CW. 10 kHz-100 MHz.

Rated Output Power 3500 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 3000 watts / Min. 2700 watts
Power Output @ 1dB compression
 Nominal 2500 watts / Min. 2000 watts
Flatness ± 1.5 dB max./± 0.5 dB with internal leveling
Frequency Response 10 kHz - 100 MHz instantaneously
Gain (at max. setting) 66 dB min.
Gain Adjustment (continuous range) 20 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
Output Impedance 50 ohms, VSWR 2.5:1 max.
Mismatch Tolerance*
 Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May limit to 1750 watts reflected power.
Harmonic Distortion Minus 20 dBc max. at 2000 watts
Third Order Intercept Point 73 dBm typ.
RF Power Display 0 - 5000 watts full scale
Pulse Mode Characteristics
 Signal (into 50 ohms) +2.0 to 6.0 VDC
 Rise Time 0.5 microseconds max.
 Fall Time 0.5 microseconds
 RF Rise/Fall Time 10 nanoseconds max.
Primary Power (user must specify)
 180 - 267 VAC Delta (4 wire)
 360 - 435 VAC, Wye (5 wire)
 47 - 63Hz, 3 phase, 15,000 watts max. at .99 PF. typ.
RF Connectors
 RF Input Type N female on rear panel
 RF Output Type 7/16 female on rear panel
 External Leveling Inputs Type BNC female on front panel
 Pulse Modulation Inputs Type BNC female on front panel
 Detected RF Output Type BNC female on front panel
 Remote Control 24 pin female GPIB/IEEE-488 connector on rear panel
 Safety Interlock 15 pin female Type D on rear panel
Cooling Forced air (self contained fans)
Weight 317.5 kg (900 lb)
Size (WxHxD)
 56.2 x 152 x 100 cm / 22.1 x 60 x 39.4 in



RF Amplifiers 10 kHz to 225 MHz



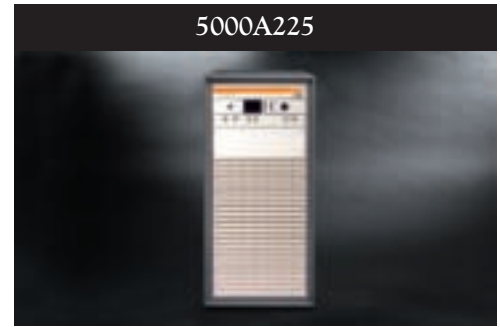
1000 watts CW. 10 kHz-225 MHz.

Rated Output Power	1000 watts
Input For Rated Output	1.0 milliwatt max.
Power Output @ 1dB compression	
Nominal 900 watts / Min. 700 watts	
Flatness	±3.5 dB max. ±0.8 dB with internal leveling
Frequency Response	10 kHz - 225 MHz instantaneously
Gain (at max. setting)	61 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 500 watts reflective power.	
Harmonic Distortion	Minus 20 dBc max. at 750 watts
Third Order Intercept Point	68 dBm typ.
RF Power Display	0 - 2000 watts full scale
Pulse Mode Gating Characteristics	
Signal (into 50 ohms)	±2.0 to 6.0 VDC
Rise Time	0.5 microseconds max.
Fall Time	0.5 microseconds
RF Rise/Fall Time	10 nanoseconds max.
Primary Power	
187 - 264 VAC	
47 - 63 Hz, single phase (user must specify)	
5000 watts max. at .95 PF, typ.	
Connectors	
RF Input	Type N female on rear panel
RF Output	Type 7-16 DIN Female, rear panel
Forward RF Sample	Type BNC female on front panel
Reverse RF Sample	Type BNC female on front panel
Remote Control	
IEEE-488	24 pin female on rear panel
RS-232	9-pin female Type D on rear panel
Remote Control (Fiber Optic)	
ST connector. Tx and Rx RS-232	
Safety Interlock	15 pin female Type D on rear panel
Cooling	Forced air (self contained fans)
Weight	127 kg (280 lb)
Size (WxHxD)	
56.1 x 109.2 x 88.9 cm / 22.1 x 43 x 35 in	



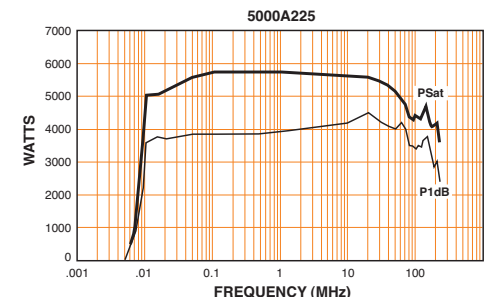
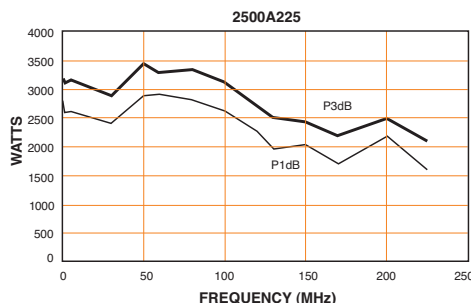
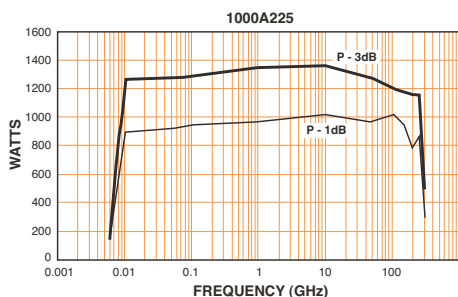
2500 watts CW. 10 kHz-225 MHz.

Rated Output Power	2500 watts, 10 kHz - 100 MHz
Input For Rated Output	2500 - 1900 watts, 100 MHz - 225 MHz (derating slope of 4.8 watts/MHz)
Power Output for 1dB compression	
2000 watts, 10 kHz - 100 MHz	
2000 - 1200 watts, 100 MHz - 225 MHz (derating slope of 6.4 watts/MHz)	
Flatness	±3.5 dB max. ±0.8 dB with internal leveling
Frequency Response	10 kHz - 225 MHz instantaneously
Gain (at max. setting)	64 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 1250 watts reflected power.	
Harmonic Distortion	Minus 20 dBc max. at 1800 watts
RF Power Display	0 - 3000 watts full scale
Pulse Mode Gating Characteristics	
Signal (into 50 ohms)	+2.0 to 6.0 VDC
Rise Time	0.5 microseconds max.
Fall Time	0.5 microseconds max.
Primary Power (user must specify)	
187 - 264 VAC Delta (4-wire), 3-Phase, 10,000 watts max.	
365 - 528 VAC, Wye (5-wire)	
Connectors	
RF Input	Type N female on rear panel
RF Output	Type 7-16 DIN Female on rear panel
Forward Sample	Type BNC female on front panel
Reverse Sample	Type BNC female on front panel
Safety Interlock	15 pin female Type D on rear panel
Remote Control	
IEEE-488	24 pin female on rear panel
RS-232	9-pin female Type D on rear panel
Remote Control (fiber optic)	ST Connector
Cooling	Forced air, internal self-contained liquid
Weight	159 kg (350 lb)
Size (WxHxD)	
56.1 x 109.2 x 88.9 cm / 22.1 x 43 x 35 in	

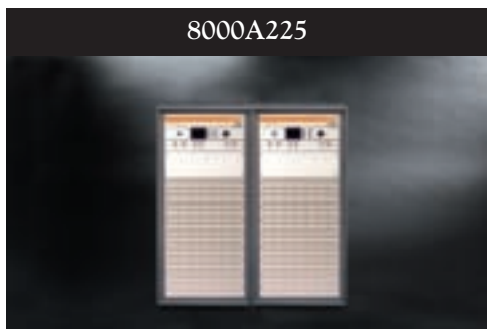


5000 watts CW. 10 kHz-225 MHz.

Rated Output Power	5000 watts, 10 kHz - 50 MHz
Input For Rated Output	5000 - 4000 watts, 50 MHz - 200 MHz (derating slope from 50 MHz - 200MHz) 6.66 watts/MHz
Power Output for 1dB compression	
3400 watts, 10 kHz - 100 MHz	
3400 - 2500 watts, 100 MHz - 200 MHz (derating slope of 9.0 watts/MHz)	
2000 watts, 200 MHz - 225MHz	
Flatness	±1.5 dB max. ±0.8 dB with internal leveling
Frequency Response	10 kHz - 225 MHz instantaneously
Gain (at max. setting)	67 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% rated power without foldback up to 6.0:1 mismatch above which may limit to 2500 watts reflected power, from 10 kHz to 50 MHz. Limited to 2000 watts reflected power from 50 MHz to 225 MHz.	
Harmonic Distortion	Minus 20 dBc max. at 3000 watts
Third Order Intercept Point	74 dBm typ.
RF Power Display	0 - 7500 watts full scale
PF Rise/Fall Time	10 nanoseconds max.
Primary Power (user must specify)	
187 - 264 VAC Delta (4 wire), Wye compatible	
365 - 528 VAC, Wye (5 wire)	
47 - 63 Hz, 3-phase	
20,000 watts max. at .95 PF, typ.	
Connectors	
RF Input	Type N female on rear panel
RF Output	Type 7-16 DIN Female on rear panel
Forward Sample	Type BNC female on front panel
Reverse Sample	Type BNC female on front panel
Safety Interlock	15 pin female Type D on rear panel
Remote Control	
IEEE-488	24 pin female on rear panel
RS-232	9-pin female Type D on rear panel
Remote Control (fiber optic)	ST Connector
Cooling	Forced air (self contained fans with internal self-contained liquid cooling)
Weight	250 kg (550 lb)
Size (WxHxD)	
56 x 152.4 x 97.5 cm / 22.1 x 60 x 38.4 in	



10 kHz to 250 MHz



8000A225

8000 watts CW. 10 kHz-225 MHz.

Rated Output Power 8000 watts, 10 kHz - 100 MHz
8000 - 6000 watts, 100 MHz - 225 MHz
(derating slope of 16.0 watt/MHz)

Input For Rated Output 1.0 mW max.

Power Output for 1dB compression
6500 watts, 10 kHz - 100 MHz
6500 - 4500 watts, 100 MHz - 225 MHz
(derating slope of 16.0 watts/MHz)

Flatness ±1.5 dB min.
±0.8 dB with internal leveling

Frequency Response 10 kHz - 225 MHz instantaneously

Gain (at max. setting) 67 dB min.

Gain Adjustment (continuous range) 20 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, nominal

Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch above which may limit to 4000 watts reflected power, from from 10 kHz to 100 MHz. Limited to 3000 watts reflected power from 50 MHz to 225 MHz.

Harmonic Distortion Minus 20 dBc max. at 6000 watts

Third Order Intercept Point 74 dBm typ.

RF Power Display 0 - 15,000 watts full scale

PF Rise/Fall Time 10 nanoseconds max.

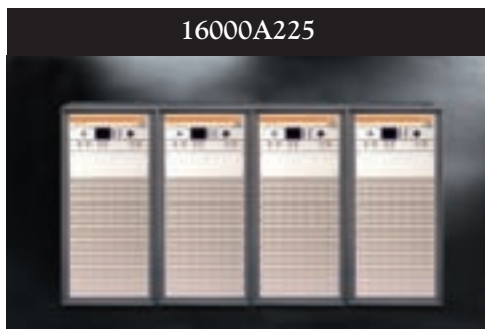
Primary Power (user must specify)
187 - 264 VAC Delta (4 wire), Wye compatible
365 - 528 VAC, Wye (5 wire)
47 - 63 Hz, 3-phase
40,000 watts max. at .95 PF. typ.

Connectors
RF Input Type N female on rear panel
RF Output Type 7-16 DIN Female on rear panel
Forward Sample Type BNC female on front panel
Reverse Sample Type BNC female on front panel
Safety Interlock 15 pin female Type D on rear panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9-pin female Type D on rear panel
Remote Control (fiber optic) ST Connector

Cooling
Forced air (self contained fans with internal liquid cooling)

Weight 500 kg (1100 lb)

Size (WxHxD)
114 x 152 x 100 cm / (45 x 60 x 39.4 in)



16000A225

16000 watts CW. 10 kHz-225 MHz.

Rated Output Power 16,000 watts, 10 kHz - 50 MHz
16,000 - 12,000 watts, 50 MHz - 225 MHz
(derating slope of 22.8 watts/MHz)

Input For Rated Output 1.0 mW max.

Power Output for 1dB compression
12,000 watts, 10 kHz - 50 MHz
12,000 - 8000 watts, 50 MHz - 200 MHz
(derating slope of 26.66 watts/MHz)
6000 watts, 200 MHz - 225MHz

Flatness ±2.0 dB max.
±1.0 dB with internal leveling

Frequency Response 10 kHz - 225 MHz instantaneously

Gain (at max. setting) 72 dB min.

Gain Adjustment (continuous range) 20 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

Output Impedance 50 ohms, nominal

Mismatch Tolerance*
100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 8000 watts reflected power, from from 10 kHz to 50 MHz. Limited to 6000 watts reflected power from 100 MHz to 225 MHz.

Harmonic Distortion Minus 20 dBc max. at 10,000 watts

Third Order Intercept Point 77 dBm typ.

RF Power Display 0 - 25,000 watts full scale

PF Rise/Fall Time 10 nanoseconds max.

Primary Power (user must specify)
187 - 264 VAC Delta (4 wire), Wye compatible
365 - 528 VAC, Wye (5 wire)
47 - 63 Hz, 3-phase
Note that in Wye configurations neutral may be used only for low-power circuits 75,000 watts max. at .95 PF. typ.

Connectors
RF Input Type N female on rear panel
RF Output Type EIA 3-1/8 male on rear panel
Forward Sample Type BNC female on front panel
Reverse Sample Type BNC female on front panel
Safety Interlock 15 pin female Type D on rear panel
Remote Control
IEEE-488 24 pin female on rear panel
RS-232 9-pin female Type D on rear panel
Remote Control (fiber optic) ST Connector

Cooling
Forced air (self contained fans); air-cooled w/self-contained internal liquid cooling

Weight (max.) 725 kg (1600 lb)

Size (WxHxD)
280.5 x 132 x 88.9 cm / 110.5 x 52 x 35 in



25A250A

25 watts CW. 10 kHz-250 MHz.

Rated Output Power 25 watts

Input For Rated Output 1.0 milliwatt max.

Power Output @ 3dB compression
Nominal 32 watts / Min. 25 watts

Power Output @ 1dB compression
Nominal 20 watts / Min. 15 watts

Flatness ±1.0 dB max.

Frequency Response 10 kHz - 250 MHz instantaneously

Gain (at max. setting) 44 dB min.

Gain Adjustment (continuous range) 18 dB min.

Input Impedance 50 ohms, VSWR 1.5:1 max.

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.

Noise Figure (above 1.0 MHz) 16 dB typ.

Harmonic Distortion Minus 20 dBc max. at 15 watts

Third Order Intercept Point 54 dBm typ.

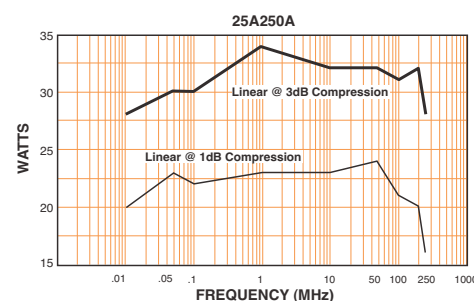
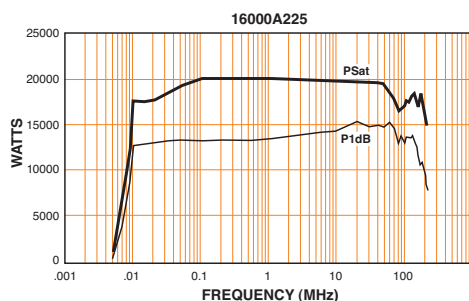
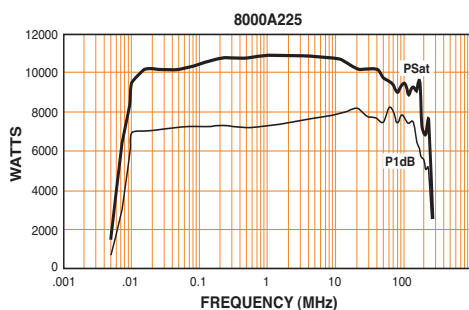
Primary Power
90 - 135 / 180 - 270 VAC
47 - 63 Hz, single phase, 200 watts max.

Connectors
RF Input Type N female on front panel
RF Output Type N female on front panel

Cooling Forced air (self contained fans)

Weight 15.9 kg (35 lb)

Size (WxHxD)
50.3 x 15.5 x 30 cm / 19.8 x 6.1 x 11.8 in



RF Amplifiers 10 kHz to 250 MHz



75A250A

75 watts CW. 10 kHz-250 MHz.

Rated Output Power	75 watts
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Nominal 100 watts / Min. 75 watts
Power Output @ 1dB compression	Nominal 70 watts / Min. 50 watts
Flatness	±1.0 dB max.
Frequency Response	10 kHz - 250 MHz instantaneously
Gain (at max. setting)	49 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*	100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Noise Figure (above 1.0 MHz)	16 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 50 watts
Third Order Intercept Point	57 dBm typ.
Primary Power	90 - 135 / 180 - 270 VAC 47 - 63 Hz, single phase, 400 watts max.
Connectors	RF Input Type N female on front panel RF Output Type N female on front panel
Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D female
Cooling	Forced air (self contained fans)
Weight	20.5 kg (45 lb)
Size (WxHxD)	50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in



100A250A

100 watts CW. 10 kHz-250 MHz.

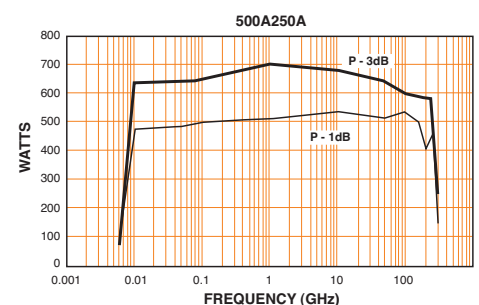
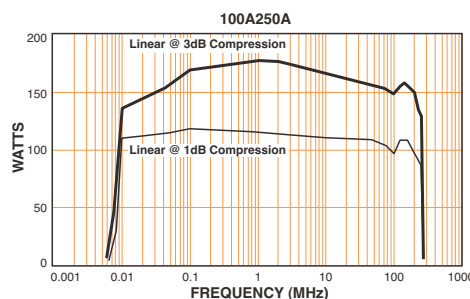
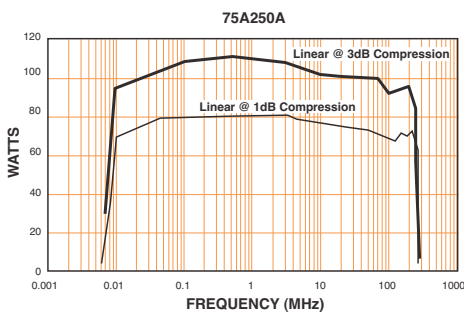
Rated Output Power	100 watts
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Nominal 157 watts / Min. 125 watts
Power Output @ 1dB compression	Nominal 107 watts / Min. 75 watts
Flatness	±1.5 dB max.
Frequency Response	10 kHz - 250 MHz instantaneously
Gain (at max. setting)	50 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*	100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Noise Figure (above 1.0 MHz)	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 75 watts
Third Order Intercept Point	58 dBm typ.
Primary Power	90 - 135 / 180 - 270 VAC autoranging 47 - 63 Hz, single phase, 1000 watts max.
Connectors	RF Input Type N female on front panel RF Output Type N female on front panel
Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D female
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	31.75 kg (70 lb)
Size (WxHxD)	50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in



500A250A

500 watts CW. 10 kHz-250 MHz.

Rated Output Power	500 watts
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Nominal 600 watts / Min. 500 watts
Power Output @ 1dB compression	Nominal 500 watts / Min. 350 watts
Flatness	±2.0 dB max.
Frequency Response	10 kHz - 250 MHz instantaneously
Gain (at max. setting)	57 dB min.
Gain Adjustment (continuous range)	10 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 250 watts reflected power. Will operate without damage, or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion	Minus 20 dBc max. at 350 watts
Third Order Intercept Point	65 dBm typ.
RF Power Display	0 - 750 watts full scale
Primary Power	180 - 264 VAC 47 - 63 Hz, 2500 watts max. @ 0.99 PF typ.
Connectors	RF Input Type N female on front panel RF Output Type N female on front panel Forward Sample Type BNC female on front panel Reverse Sample Type BNC female on front panel Safety Interlock 15 pin female Type D on rear panel Remote Control IEEE-488 24 pin female on rear panel RS-232 9 pin female Type D on rear panel USB Type B female
Cooling	Forced air (self contained fans)
Weight	45.8 kg (101 lb)
Size (WxHxD)	50.3 x 34 x 56.9 cm / 19.8 x 13.4 x 22 in





75A400

75 watts CW. 10 kHz-400 MHz.

Rated Output Power	75 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Nominal 100 watts / Min. 75 watts
Power Output @ 1dB compression	Nominal 75 watts / Min. 50 watts
Flatness	±1.5 dB max.
Frequency Response	10 kHz - 400 MHz instantaneously
Gain (at max. setting)	49 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*	100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Noise Figure (above 1.0 MHz)	6 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 50 watts
Third Order Intercept Point	57 dBm typ.
Primary Power	90 - 135 / 180 - 270 VAC 47 - 63 Hz, single phase, 400 watts max.
Connectors	RF Input Type N female on front panel RF Output Type N female on front panel
Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D female
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	23.4 kg (51.5 lb)
Size (WxHxD)	50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in



150A250

150 watts CW. 100 kHz-250 MHz.

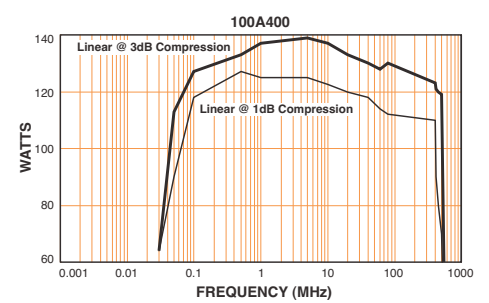
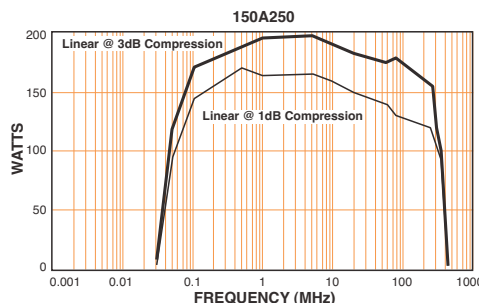
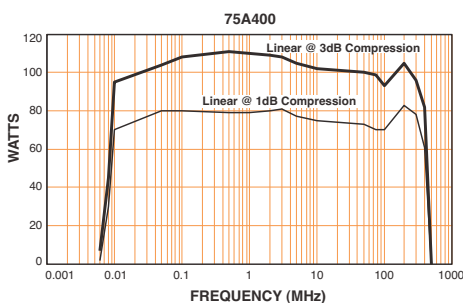
Rated Output Power	150 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Nominal 180 watts / Min. 155 watts
Power Output @ 1dB compression	Nominal 150 watts / Min. 120 watts
Flatness	±1.5 dB max.
Frequency Response	100 kHz - 250 MHz instantaneously
Gain (at max. setting)	52 dB min.
Gain Adjustment Range	20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, VSWR 2.0:1 max.
Mismatch Tolerance*	100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion	Minus 20 dBc max. at 120 watts
Third Order Intercept Point	58 dBm typ.
Primary Power	90 - 135 / 180 - 270 VAC auto ranging 47 - 63Hz, single phase, 1000 watts max.
Connectors	RF Input Type N female on front panel RF Output Type N female on front panel
Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin subminiature D female
Safety Interlock	15 pin subminiature D
Cooling	Forced air (self-contained fans)
Weight	31.75 kg (70 lb)
Size (WxHxD)	50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in



100A400

100 watts CW. 100 kHz-400 MHz.

Rated Output Power	100 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Nominal 130 watts / Min. 100 watts
Power Output @ 1dB compression	Nominal 100 watts / Min. 75 watts
Flatness	±1.5 dB max.
Frequency Response	100 kHz - 400 MHz instantaneously
Gain (at max. setting)	50 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
Output Impedance	50 ohms, VSWR 2.0:1 typ.
Mismatch Tolerance*	100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion	Minus 20 dBc max. at 75 watts
Third Order Intercept Point	58 dBm typ.
Primary Power	90 - 135 / 180 - 270 VAC auto ranging 47 - 63Hz, single phase, 1000 watts max.
Connectors	RF Input Type N female on front panel RF Output Type N female on front panel
Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D female
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	36 kg (80 lb)
Size (WxHxD)	50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in



100 kHz to 400 MHz 100 kHz to 1000 MHz 500 kHz to 1000 MHz



150A400

150 watts CW. 100 kHz-400 MHz.

Rated Output Power	150 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 155 watts / Min. 130 watts	
Power Output @ 1dB compression	
Nominal 125 watts / Min. 100 watts	
Flatness	±1.5 dB max.
Frequency Response	
100 kHz - 400 MHz instantaneously	
Gain (at max. setting)	52 dB min.
Gain Adjustment Range	20 dB min.
Input Impedance	50 ohms, VSWR 1.5:1 max.
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.	
Harmonic Distortion	Minus 20 dBc max. at 100 watts
Third Order Intercept Point	58 dBm typ.
Primary Power	
90 - 135 / 180 - 270 VAC auto ranging	
47 - 63Hz, single phase, 1000 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D female
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	36 kg (80 lb)
Size (WxHxD)	
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in	



1W1000B

1 watt CW. 100 kHz-1000 MHz.

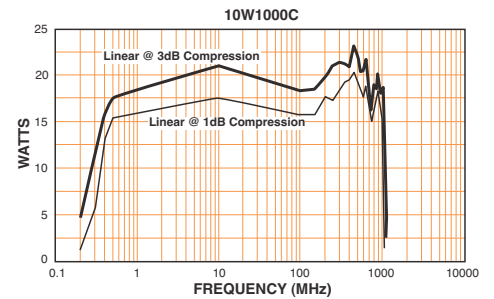
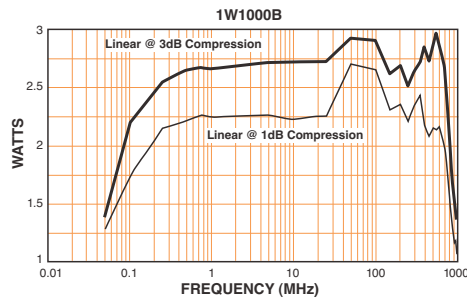
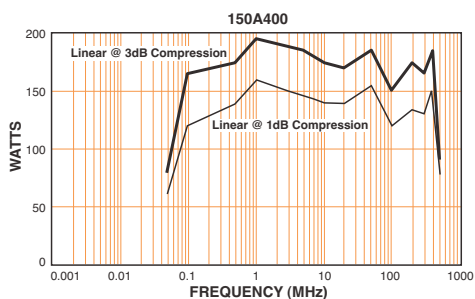
Rated Output Power	1.0 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 2.5 watts / Min. 1.0 watts	
Power Output @ 1dB compression	
Nominal 2 watts / Min. 1.0 watts	
Flatness	±0.5 dB typ. / ±1.0 dB max.
Frequency Response	100 kHz - 1000 MHz instantaneously
Gain (at max. setting)	30 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
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.	
Harmonic Distortion	Minus 20 dBc max. at 1.0 watts
Third Order Intercept Point	42 dBm typ.
Primary Power	
90 - 264 VAC	
47 - 440 Hz, single phase, 60 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Cooling	Forced air (self-contained fan)
Weight	4.5 kg (10 lb)
Size (WxHxD)	
26 x 11.7 x 21.6 cm / 10.3 x 4.6 x 8.5 in	



10W1000C

10 watts CW. 500 kHz-1000 MHz.

Rated Output Power	10 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 20 watts / Min. 10 watts	
Power Output @ 1dB compression	
Nominal 17 watts / Min. 10 watts	
Flatness	±1.0 dB typ. / ±1.5 dB max.
Frequency Response	
500 kHz - 1000 MHz instantaneously	
Gain (at max. setting)	40 dB min.
Gain Adjustment (continuous range)	
20 dB min. (4096 steps remote)	
Input Impedance	50 ohms, VSWR 2.0:1 max.
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.	
Harmonic Distortion	Minus 20 dBc max. at 10 watts
Third Order Intercept Point	50 dBm typ.
Primary Power	
90 - 132, 180 - 264 VAC	
50 / 60 Hz, single phase, 300 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D female
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	20.5 kg (45 lb)
Size (WxHxD)	
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in.	

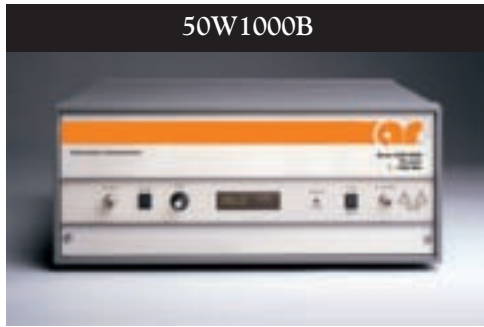




30W1000B

30 watts CW. 1-1000 MHz.

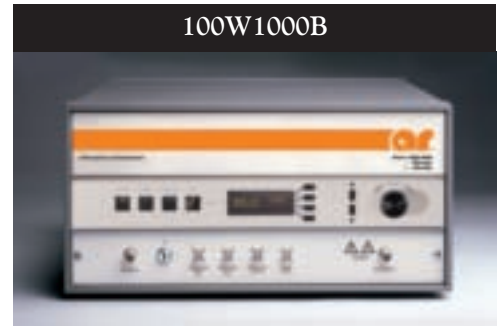
Rated Output Power 30 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 36 watts / Min. 30 watts
Power Output @ 1dB compression
 Nominal 27 watts / Min. 20 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response 1 - 1000 MHz instantaneously
Gain (at max. setting) 45 dB min.
Gain Adjustment (continuous range)
 20 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
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.
Harmonic Distortion Minus 20 dBc max. at 25 watts
Third Order Intercept Point 52 dBm typ.
Primary Power
 90 - 132, 180 - 264 VAC
 50 / 60 Hz, single phase, 325 watts max.
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
Remote Interfaces
 IEEE-488 24 pin female
 RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 20.5 kg (45 lb)
Size (WxHxD)
 50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in



50W1000B

50 watts CW. 1-1000 MHz.

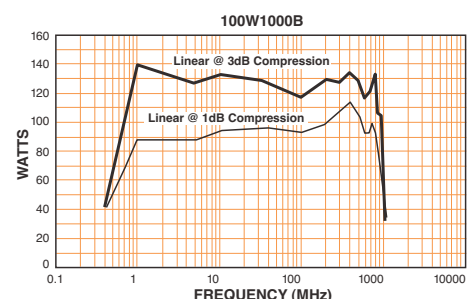
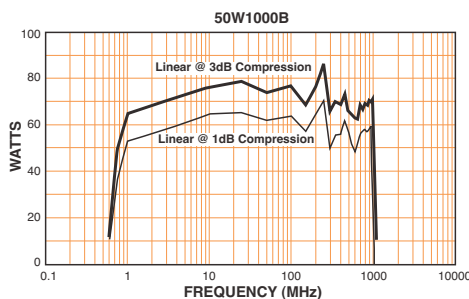
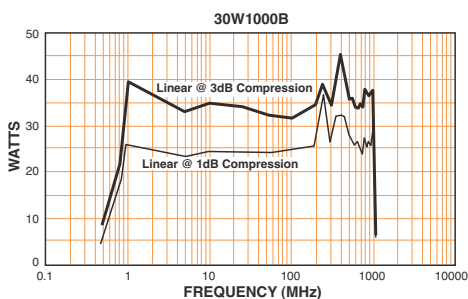
Rated Output Power 50 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 70 watts / Min. 50 watts
Power Output @ 1dB compression
 Nominal 55 watts / Min. 40 watts
Flatness ±1.0 dB typ. / ±1.5 dB max.
Frequency Response 1 - 1000 MHz instantaneously
Gain (at max. setting) 47 dB min.
Gain Adjustment (continuous range)
 20 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
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.
Harmonic Distortion Minus 20 dBc max. at 50 watts
Third Order Intercept Point 57 dBm typ.
Primary Power
 90 - 132, 180 - 264 VAC
 50 / 60 Hz, single phase, 600 watts max.
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
Remote Interfaces
 IEEE-488 24 pin female
 RS-232 9 pin Subminiature D female
Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 25.9 kg (57 lb)
Size (WxHxD)
 50.3 x 20.3 x 45.7 cm / 19.8 x 8 x 18.1 in



100W1000B

100 watts CW. 1-1000 MHz.

Rated Output Power 100 watts
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 123 watts / Min. 100 watts
Power Output @ 1dB compression
 Nominal 95 watts / Min. 75 watts
Flatness ±2.0 dB max. / 1.5 dB typ.
 ±0.8 dB with internal leveling
Frequency Response 1 - 1000 MHz instantaneously
Gain (at max. setting) 50 dB min.
Gain Adjustment (continuous range)
 18 dB min. (4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
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.
Harmonic Distortion Minus 20 dBc max. at 80 watts
Third Order Intercept Point 58 dBm typ.
RF Power Display 0 - 200 watts
Primary Power
 90 - 264 VAC
 40 / 400 Hz, single phase, 1200 watts max.
Connectors
 RF Input Type N female on front panel
 RF Output Type N female on front panel
Remote Interfaces
 IEEE-488 24 pin female
 RS-232 9 pin Subminiature D female
 ALC & Pulse Type BNC on front panel
Safety Interlock 15 pin Subminiature D
Cooling Forced air (self contained fans)
Weight 40 kg (88 lb)
Size (WxHxD)
 50.3 x 24.9 x 53 cm / 19.8 x 9.8 x 21.1 in



80 to 1000 MHz

150W1000



150 watts CW. 80-1000 MHz.

Rated Output Power	150 watts
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 140 watts / Min. 120 watts	
Power Output @ 1dB compression	
Nominal 120 watts / Min. 100 watts	
Flatness	
±2.0 dB max. / 1.5 dB typ.	
±0.8 dB with internal leveling	
Frequency Response	80 - 1000 MHz instantaneously
Gain (at max. setting)	52 dB min.
Gain Adjustment (continuous range)	
18 dB min. (4096 steps remote)	
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
Will operate without damage or oscillation with any magnitude and phase of source and load impedance. Will limit reflected power to 100 watts.	
Harmonic Distortion	Minus 20 dBc max. at 100 watts
Third Order Intercept Point	58 dBm typ.
RF Power Display	0 - 200 watts
Primary Power	
90 - 264 VAC	
40 / 400 Hz, single phase, 1200 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D female
ALC & Pulse	Type BNC on front panel
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	40 kg (88 lb)
Size (WxHxD)	
50.3 x 24.9 x 53 cm / 19.8 x 9.8 x 21.1 in	

250W1000A



250 watts CW. 80-1000 MHz.

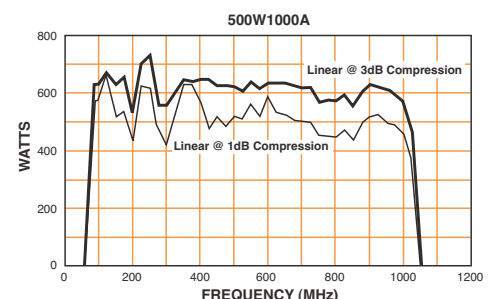
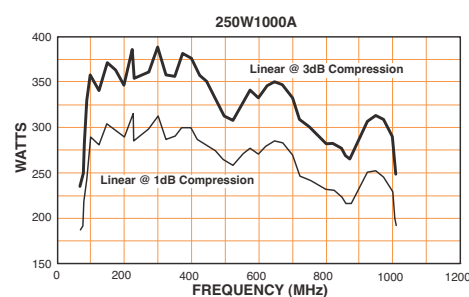
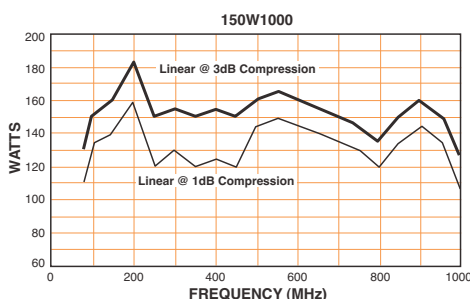
Rated Output Power	250 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 310 watts / Min. 250 watts	
Power Output @ 1dB compression	
Nominal 255 watts / Min. 200 watts	
Flatness	±2.0 dB max. / ±1.5 dB typ.
Frequency Response	80 - 1000 MHz instantaneously
Gain (at max. setting)	54 dB min.
Gain Adjustment (continuous range)	
18 dB min. (4096 steps remote)	
Input Impedance	50 ohms, VSWR 2.0:1 max.
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.	
Harmonic Distortion	Minus 20 dBc max. at 200 watts
Third Order Intercept Point	62 dBm typ.
Primary Power (user must specify)	
120 - 240 VAC	
40 / 400 Hz, single phase, 2200 watts max.	
Connectors	
RF Input	Type N female on front panel
RF Output	Type N female on front panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin subminiature D female
Fiber Optic	ST Conn Tx and Rx RS-232
ALC & Pulse	Type BNC on front panel
Safety Interlock	15 pin subminiature D on rear panel
Cooling	Forced air (self contained fans)
Weight	86.2 kg (190 lb)
Size (WxHxD)	
50.3 x 47 x 61 cm / 19.8 x 18.5 x 24 in	

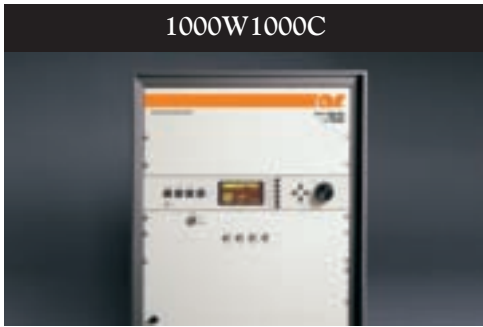
500W1000A



500 watts CW. 80-1000 MHz.

Rated Output Power	525 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Nominal 612 watts / Min. 450 watts	
Power Output @ 1dB compression	
Nominal 515 watts / Min. 350 watts	
Flatness	±2.0 dB max. / ±0.8 dB with internal leveling
Frequency Response	80 - 1000 MHz instantaneously
Gain (at max. setting)	57 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 250 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 20 dBc max. at 400 watts
Third Order Intercept Point	63 dBm typ.
RF Power Display	0 - 600 watts full scale
Primary Power	
200 - 250 VAC,	
50 / 60 Hz, single phase, 6500 VA max.	
Connectors	
RF Input	Type N female on rear panel
RF Output	Type N female on rear panel
External Leveling Inputs	Type BNC female on front panel
Pulse Modulation Input	Type BNC female on front panel
Detected RF Output	Type BNC female on front panel
Safety Interlock	15 pin subminiature D on rear panel
Remote Computer Interface	24 pin IEEE-488 (GPIB) connector and RS-232 connector on rear panel
Remote Computer Interface (fiber optic)	ST Conn Tx and Rx RS-232
Cooling	Forced air (self contained fans)
Weight	174 kg (383 lb)
Size (WxHxD)	
56.1 x 149.9 x 58.4 cm / 22.1 x 59 x 23 in	

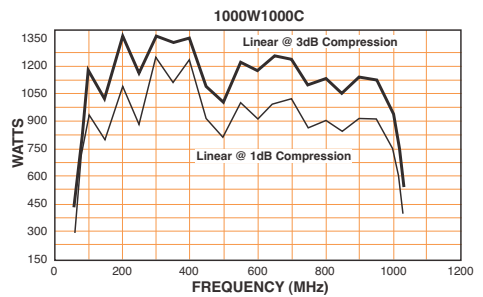




1000W1000C

1000 watts CW. 80-1000 MHz.

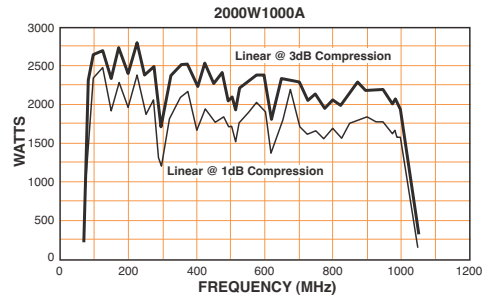
Rated Output Power 1000 watts min.
Input For Rated Output 1.0 milliwatt max.
Power Output @ 3dB compression
 Nominal 1150 watts / Min. 850 watts
Power Output @ 1dB compression
 Nominal 920 watts / Min. 700 watts
Flatness ±2.0 dB max. / ±0.8 dB with internal leveling
Frequency Response 80 - 1000 MHz instantaneously
Gain (at max. setting) 60 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
 100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 500 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 800 watts
Third Order Intercept Point 66 dBm typ.
RF Power Display 0 - 1200 watts full scale
Primary Power (user must specify)
 200 - 240 VAC, Delta (4 wire)
 360 - 435 VAC, Wye (5 wire)
 50 / 60 Hz, 3 phase, 12 kVA max.
Connectors
RF Input Type N female on rear panel
RF Output Type 7/16 female on rear panel
External Leveling Inputs Type BNC female on front panel
Pulse Modulation Input Type BNC female on front panel
Detected RF Output Type BNC female on front panel
Remote Computer Interface 24 pin female IEEE-488 (GPIB) and RS-232 connectors on rear panel
Remote Computer Interface (fiber optic) ST Conn Tx and Rx RS-232
Safety Interlock 15 pin subminiature D on rear panel
Operate Interface 27 pin subminiature D on rear panel
Cooling Forced air (self contained fans)
Weight (approximate) 340 kg (750 lb)
Size (WxHxD)
 68.8 x 152.5 x 82.5 cm / 27.1 x 60 x 32.5 in



2000W1000A

2000 watts CW. 80-1000 MHz.

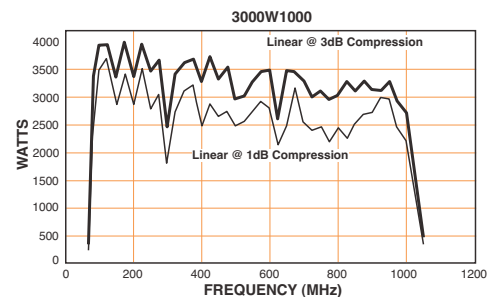
Rated Output Power 1900 watts min.
Input For Rated Output 1.0 milliwatts max.
Power Output @ 3dB compression
 Nominal 2100 watts / Min. 1650 watts
Power Output @ 1dB compression
 Nominal 1750 watts / Min. 1200 watts
Flatness ±2.5 dB max. / ±0.8 dB with internal leveling
Frequency Response 80 - 1000 MHz instantaneously
Gain (at max. setting) 63 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
 100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 950 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 1500 watts
Third Order Intercept Point 70 dBm typ.
RF Power Display 0 - 2500 watts
Primary Power (user must specify)
 200 - 250 VAC, Delta (4 wire)
 360 - 435 VAC, Wye (5 wire)
 50 / 60 Hz, 3 phase, 24 kVA max.
Connectors
RF Input Type N female on rear panel
RF Output Type 1 5/8 EIA on rear panel
External Leveling Inputs Type BNC female on front panel
Pulse Modulation Input Type BNC female on front panel
Detected RF Output Type BNC female on front panel
Safety Interlock 15 pin female subminiature D on rear panel
Remote Computer Interface 24 pin female IEEE-488.2 (GPIB) connector on rear panel
Remote Computer Interface (fiber optic) ST Conn Tx and Rx RS-232
Cooling Forced air (self contained fans)
Weight (approximate) 839 kg (1850 lb)
Size (WxHxD) (3 cabinets)
 201 x 158 x 160 cm / 79 x 62 x 63 in



3000W1000

3000 watts CW. 80-1000 MHz.

Rated Output Power 2800 watts min.
Input For Rated Output 1.0 milliwatts max.
Power Output @ 3dB compression
 Nominal 3000 watts / Min. 2200 watts
Power Output @ 1dB compression
 Nominal 2500 watts / Min. 1750 watts
Flatness ±2.5 dB max. / ±0.8 dB with internal leveling
Frequency Response 80 - 1000 MHz instantaneously
Gain (at max. setting) 65 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
 100% of rated power without foldback up to 6.0:1 mismatch above, which may limit to 1500 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
Harmonic Distortion Minus 20 dBc max. at 2150 watts
Third Order Intercept Point 72 dBm typ.
RF Power Display 0 - 4500 watts
Primary Power (user must specify)
 200 - 250 VAC, Delta (4 wire)
 360 - 435 VAC, Wye (5 wire)
 50 / 60 Hz, 3 phase, 37 kVA max.
Connectors
RF Input Type N female on front panel
RF Output Type 1 5/8 EIA on rear panel
External leveling inputs Type BNC female on front panel
Pulse modulation input Type BNC female on front panel
Detected RF output Type BNC female on front panel
Safety interlock 15 pin female subminiature D on rear panel
Remote Computer Interface 24 pin female GPIB/IEEE-488 and 9 pin RS-232 connectors on rear panel
Remote Computer Interface (fiber optic) ST Conn Tx and Rx RS-232
Cooling Forced air (self contained fans)
Weight (approximate) 1453 kg (2625 lb)
Size (WxHxD) (4 cabinets)
 272 x 158 x 160 cm / 107 x 62 x 63 in



80 to 1000 MHz



4000 watts CW. 80-1000 MHz.

Rated Output Power	3600 watts min.
Input For Rated Output	1.0 milliwatts max.
Power Output @ 3dB compression	
Nominal 4400 watts / Min. 2800 watts	
Power Output @ 1dB compression	
Nominal 3400 watts / Min. 2200 watts	
Flatness	± 2.5 dB max. / ± 0.8 dB with internal leveling
Frequency Response	80 - 1000 MHz instantaneously
Gain (at max. setting)	66 dB min.
Gain Adjustment (continuous range)	18 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
50% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.	
Harmonic Distortion	Minus 20 dBc max. at 2800 watts
Third Order Intercept Point	73 dBm typ.
RF Power Display	0 - 6000 watts
Primary Power (user must specify)	
200 - 250 VAC, Delta (4 wire)	
360 - 435 VAC, Wye (5 wire)	
50 / 60 Hz, 3 phase, 48 kVA max.	
Connectors	
RF input	Type N female on front panel
RF output	Type 1 5/8 EIA on rear panel
External leveling inputs	Type BNC female on front panel
Pulse modulation input	Type BNC female on front panel
Detected RF output	Type BNC female on front panel
Safety interlock	15 pin female subminiature D on rear panel
Remote Computer Interface	24 pin female GPIB/IEEE-488 and 9 pin RS-232 connectors on rear panel
Remote Computer Interface (fiber optic)	ST Conn Tx and Rx RS-232
Cooling	Forced air (self contained fans)
Weight (approximate)	1542 kg (3400 lb)
Size (WxHxD) (5 cabinets)	340 x 158 x 163 cm / 134 x 62 x 64 in

