

Advanced Test Equipment Rentals www.atecorp.com 800-404-ATEC (2832)



"We started the company in my basement. Because the only place we could go from there was up."

Don Shepherd, Founder

AR began in 1969 with just two men in a cellar, moonlighting from their regular jobs.

Don ("Shep") Shepherd and his partner, Dan Roth, worked for AEL (American Electronics Laboratories),



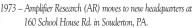
producing radio frequency design for military applications. They saw a market for their skills in designing amplifiers for test applications, but AEL was not set up for such jobs. So they decided to try and make it on their own, working out of a makeshift laboratory in Shep's cellar.

1969 - We sold our first amplifier for a total of \$600 (including \$60 for special connectors).



1970 – Moved out of Shep's cellar and up to small rented storefront.

1972 - Distribution expands into Europe.



1976 - AR introduces first 10,000 watt tube amplifier (10 kHz - 100 MHz). It's still available, and there's still no equal.



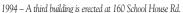
1979 – Company passes \$1 million in sales.

1987 - 75 employees now work for AR.









1996 - AR reaches \$25 million in sales with 100 employees.

2001 – The company expands it capabilities into amplifier modules

and customized systems with the acquisition of Kalmus in Bothell, WA, now AR Modular RF. Back in Souderton, a fourth building is completed. Sales exceed \$35 million.











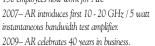
2002 - Carnel Labs in Canoga Park, CA joins the AR famil becoming AR Receiver Systems.



2003 - First 10,000 watt / 100 kHz - 250 MHz solid-state amplifier for automotive/military/avionics testing created. Still the only 10,000 watt solid state available. 2004 - The little company that started in a cellar now has 125 employees.

2005 - New engineering department and microelectronics lab (clean room) open. Sales pass the \$45 million mark.

2006 - New 15,000 sq. ft. building is completed at corporate headquarters with expanded production facilities to meet the ever-growing demand for AR products. 150 employees now work for AR.







"We Started With A Dream, And It's Grown Into A Reality."



Today we're recognized as the ultimate source for testing and communications solutions in the worlds of EMC, military, wireless, and beyond. And our products are everywhere. They're boosting the power of military radios for our troops in battle; driving the most sophisticated industrial/medical/scientific equipment; testing the emissions and susceptibility of electronic equipment; and helping new electronic products get to market faster.

We've become the industry leader by continually setting the bar a little higher. By raising quality. And increasing cost-efficiency. With innovations like "subampability" – the ability to add power to existing amps; and test systems that can be upgraded from the Internet to adapt to changing specs.

With the combined resources of all the AR companies, AR is your source for everything from RF power amplifiers, antennas, complete test systems, probes, monitors, software and receivers to military booster amps, and RF amplifier modules that can be customized to meet the toughest specs.

We take great pride in the support & service we deliver to our customers anywhere in the world, whenever they need it.

$\label{thm:limit} \mbox{Infinite VSWR Tolerance Means More Power To You.}$

Approximately 80% of the amplifiers in this brochure are completely immune to load VSWR. That means 100% of the power is delivered to the load 100% of the time. Our highest power amplifiers refuse to limit until VSWR exceeds 6.0:1 or 50% (of rated output) reflected power. Competitive Class AB amplifiers respond to reflected power from high VSWR by limiting output power at the exact time you need every bit of power. Some actually shut down. We find that completely unacceptable.

All "Class A" Is Not The Same.

Folding back is typical of Class AB and lesser-grade Class A designs. AR's Class A circuitry is built to higher standards:

- AR uses tandem push-pull transistor pairs. This arrangement is more rugged than the single output devices found in lesser grade Class A amplifiers.
- AR amplifiers use internal power combiners that can withstand high reflected power.
- AR amplifiers use only top quality, high-power internal directional couplers
- AR amplifiers use switching power supplies to increase efficiency and reduce internal heat load.

It's no wonder that only AR claims and delivers 100% rated power to the load!



Good Enough Isn't Good Enough. So We Keep Tweaking.



Solid State, Low Frequency Amplifiers.

We're constantly under the cover of our amplifiers tweaking the major components and making improvements. After years of R&D, AR has perfected the technology of optimal module performance. The result is increased bandwidth and more power, especially at the high end of the frequency range.

Two modules, one from 100 kHz to 250 MHz and one from 100 kHz to 400 MHz, offer this new technology. These modules serve as basic building blocks for the 10,000A250A and 5000A250A amplifiers, as well as for the 100A400 and 150A400 amplifiers for BCI applications.

The need for higher power is continually increasing; and AR is ready. Our new "A" Series amplifiers feature 500, 1000, and 2500-watt models with expanded coverage down to 10 kHz. And we're now able to pack more power into smaller "packages."



The Difference Is Several Times Greater.

Most AR amplifiers do not fold back or limit. The power absorbed by the load is many times greater than with competitive amplifiers that fold back at I/VSWR.



The Difference Is Power Delivered To The Load.
Since the output power of AR amplifiers does not fold back with VSWR, more power is absorbed in the load.

Ready For The Future.

Expandable Power

RF test levels are constantly increasing. The same is true for many test distances. Usually, this requires larger, more powerful amplifiers. It also means throwing out your old amps. But AR is changing all that.

Many amplifiers in our "S" and "W" Series allow you to add power to existing amps as needed. There's no need to toss out a perfectly good amp and start all over again. We call this concept "Subampability"." Much like building blocks, it enables you to add incremental power using existing amps. With a relatively simple upgrade, you can "combine" multiple amps to achieve the power you need. This is clearly an idea whose time has come. But it gets even better.

Since the higher power would be needed only for some tests, "Subampability" enables you to split the amplifiers so that they can be used individually whenever needed.

Here's an example of how "Subampability" works: If you start with a 1000W1000C amplifier (1000 Watts CW, 80 - 100 MHz) and then you need more power, you can add another 1000W1000C amplifier and a controller/combiner for 2000 watts of power. And you can keep going! With three 1000W1000C amplifiers

and one controller/combiner, you get 3000 watts of power; and so on up to 4000 watts. The amplifiers can still be used independently when tests call for less power.

See Application Note #40A Expandable Power for further details.

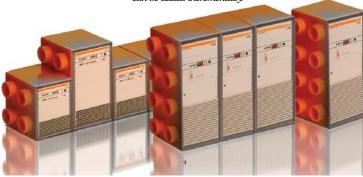
We design our amplifiers not just for today, but for tomorrow. Most models include:

- Digital Control Panels (DCP) in one of two formats: graphical vacuum fluorescent or two-line vacuum fluorescent
- Built-in IEEE-488 Interface and RS-232 interface (Fiberoptic RS-232 on Graphical DC
- Local and Remote Control (on DCP amplifier)
- Forward and Reflected Power Readout (on graphical DCPs)
 Control Status and Internal Amplifier
- Status Reports

 USB and Ethernet on selected models

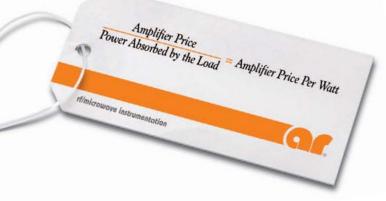
See individual amplifier spec sheets to verify the features on any amplifier.

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



3

A Better Amplifier And A Better Value. Watt For Watt, Our Amplifiers Cost Less!



Lower cost doesn't necessarily equal a better value. Not when you're paying for power that you never get.

The following equation will help you calculate the per-watt cost of your amplifier and the dollarfor-dollar value:

Amplifier Price
Power Absorbed by the Load = Amplifier Price Per Watt

Consider a typical 100 watt AR Class A amplifier driving a high VSWR (100 watt output, 50% or 50 watts reflected at 6.0:1 and 50 watts absorbed by the load) at a cost of \$20,000–

\$20,000 = \$400/watt

Compare this with a competitive 100 watt Class AB amplifier also driving a high VSWR (due to foldback, only 34 watts output, 50% or 17 watts reflected at 6.0:1 and 17 watts absorbed by the load) at a cost of \$15,000-

$$\frac{\$15,000}{17W} = \$882/wa$$

These numbers clearly demonstrate that while the initial cost of AR amplifiers may be higher, the net result based on superior performance is greater value. In other words, our amplifiers provide more bang for the buck!

The Most Comprehensive And Most Meaningful Warranty In The Industry.



AR Competitive Edge products supply a multitude of unique RF solutions to companies around the world. The company's limitless support network reaches the far corners of the globe.

AR products are backed by the company's "Competitive Edge" warranty, the best and most comprehensive warranty in the industry. When companies purchase from any AR company they have the peace of mind that comes from knowing the global leader will be there to help with any problems today, tomorrow and always.

A Global Support Network That's Second To None.

A warranty is only as good as the company and the people behind it. AR's highly-trained, experienced support staff is the best in the business. And they are right where you need them, in all the far corners of the globe. Help is just a phone call away... today, tomorrow and always.

See "Sales Associates" at www.ar-worldwide.com for a complete listing or call Customer Service at 215-723-0275. By the way, when you call,

you'll talk to a real receptionist who will connect you to the help you need. You can also call our hotline at 800-933-8181 and talk to directly an applications engineer whose job is to help one person at a time.

Value Right From The Start... a 10% Bonus.

AR's quality makes our products a good value. But we also help you save right up front. When you visit the AR booth at a trade show, you'll receive a bonus coupon that's worth 10% of the purchase price of your AR amplifier toward the purchase of any AR accessory. That's anything other than amplifiers—and it's good for up to \$20,000!

Quality, Value, Service and Innovation That No Other Company Can Match.

With the combined resources of all the AR companies, AR is your source for everything from power amplifiers, antennas, complete test systems, probes, monitors, software and receivers to amplifier modules that can be customized to meet the toughest specs.

DC to 1 MHz.

40AD1

350AH1

40 watts CW. dc-1 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Typ. 50 watts / Min. 40 watts
Power Output @ 1dB compression
Typ. 40 watts / Min. 25 watts 40 watts 1.0 milliwatt no...

Typ, 40 wars / Min. 25 wars

Frequency Response dc - 1 MHz instantaneously Grin (at rate and the strength of t ±1.5 dB max.
dc - 1 MHz instantaneously
45 dB min.
18 dB min.
50 ohms, VSWR 1.5:1 max.
50 ohms, VSWR 2.0:1 max.

and load impedance.

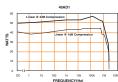
Modulation Capability

Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal. AM peak envelope power limited to specified power.

Harmonic Distortion
Third Order Intercept Point Minus 25 dBc max. at 25 watt

Primary Power (user must specify) 90 - 135 / 180 - 270 VAC 50 / 60 Hz, single phase, autoranging 400 watts max.

Cooling Forced air Weight Size (WxHxD) 50.3 x 15.5 x 30 cm / 19.8 x 6.1 x 11.8 in Forced air (self contained fans) 16 kg (35 lb)



350 watts CW. 10 Hz - 1 MHz.

Operation Power Output (1.79 Ohm load) CW, min. Voltage Output, min.

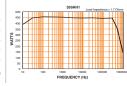
Gain Control Range Input Impedance Output Impedance Mismatch Tolerance <1W typ. 100% of rated power without fail

Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation
appearing on the input signal. AM peak envelope power
limited to specified power.

Primary Power 47, 63 Hz, single phase 1200 wart

90 - 260 VAC 47 - 63 Hz, single phase, 1200 watts max. Type BNC female on front panel 5-way binding posts on front panel

24 pin female 9 pin subminiature D female Type B female RJ-45 Ethemet
Safety Interlock 15 pix
Cooling Forced air (sei
Weight
Size (WxHzD)
50.3 x 19.9 x 37.6 cm / 19.8 x 7.85 x 14.8 in
Rack Mountable



10 kHz to 3 MHz.



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
Goin (at max. setting) 60 dB min.
Gain Adjustment (continuous range) 23 dB min.
Toout Impedance 50 ohms, nominal

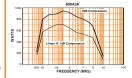
to 4.U watts renected power.

Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation
appearing on the input signal. AM peak envelope powe
limited to specified power.

Type N female on front panel Type N female on front panel remote Control

IEEE-488/RS-232, USB ability to remote control and power an external impedance transformer.

Size (WxHxD) 50.3 x 34 x 55.1 cm / 19.8 x 13.4 x 21.7 in For external impedance transformer options, se sheet for IT2000 Series impedance transformer



1500A3

.... 1500 watts CW. 10 kHz-3 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 1500 wasts / Min. 1400 watts
Power Output @ 1dB compression
Nominal 1000 watts / Min. 800 watts

Nominal 1000 watts / Min. 800 watts

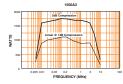
House | 10.4 He are.

Frequency Response | 10.4 Hr - 3 MHr instantaneously
Gain (at max setting) | 6 d dB min.
Gain Adjustment (continuous range) | 23 dB min.
Gain Adjustment (continuous range) | 23 dB min.
Gain Adjustment (continuous range) | 23 dB min.
Gain Adjustment (continuous range) | 24 dB min.
Gain Adjustment (continuous range) | 24 dB min.
Gain Adjustment (continuous range) | 24 dB min.
Gain Adjustment (Child The Min.
Gain Adjus

to 800 watts reflected power. May limit at rated output. Modulation Capability Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal. AM peak envelope power limited to specified power.

OCCUPIED TO SECURITY Type N female on troot panes Remote Corner of the Remote Remote Office of the Remote Remote Office of the Remote Remote Office of the Office of the Remote Office of the Remote Office of the Remote O 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.



. .

. ... 5000 watts CW. 10 kHz-3 MHz.

5000A3

. .

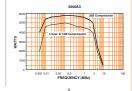
. .

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. . .

Rated Output Power Input For Rated Output Power Output @ 1dB cor 2500 watts min. Frequency Response Flatness 10 kHz - 3 MHz instantai ratness 2.10 dB max.
Gain (at max. setting) 6.7 dB min.
Gain Adjustment (continuous range) 2.0 dB min.
Gain Adjustment (continuous range) 5.0 chuns, V2M B min.
Input Impedance 5.0 chuns, V2M B min.
Input Impedance 5.0 chuns, Oxy B min.
Input Impedance 6.0 chuns reflected power.
Modahitan Capability 2.00 water seelected power.
Modahitan Capability 2.00 water seelected power.
Modahitan Capability 2.00 water seelected power.
Hammonia Distortion.
Hammonia Distor

weight (approximate) 507 k Sirie (WxHxD) 168 x 112.42 x 67.15 cm / 66.18 x 44.26 x 26.44 in For external impedance transformer options, see specific sheet for IT2000 Series impedance transformers.



10 kHz to 400 MHz.



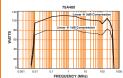
75 watts CW. 10 kHz-400 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 100 watts / Min. 75 watts
Power Output @ 1dB compression
Nominal 75 watts / Min. 50 watts

Power Output (#) LdB compression
Nominal 17 sout 70 Mrs. 50 water
Frequency Response
10 LH± -400 MHz institutations
Gain (at max. setting)
49 dB mit
Gain Algistment (continuous range)
16 and Algistment (continuous range)
16 and Algistment (continuous range)
18 dB mit
Input Impedance
50 ohns, V3WR 2.61 mit
Output Impedance
50 ohns, V3WR 2.61 mit
Output Impedance
10 ohns, V3WR 2.61 mit
Output Impedance
10

6 dB typ Minus 20 dBc max. at 50 watt 57 dBm typ

Harmonic Distortion Minus 20: Third Order Intercept Point Primary Power 90 - 135 / 180 - 270 VAC 47 - 63 Hz, single phase, 400 watts max.



10 kHz to 250 MHz.

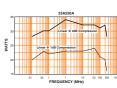
25A250A 25 watts CW. 10 kHz-250 MHz. Rated Output Power Input For Rated Output Power Output @ 3dB compression Nominal 32 watts / Min. 25 watts Power Output @ 1dB compression Nominal 20 watts / Min.15 watts 25 watts 1.0 milliwatt may ### ±1.0 dB max. 10 kHz - 250 MHz instantaneously 44 dB min. inuous range) 18 dB min.

Rower Output (6 JdB congression Nominal 20 urs) Mult 15 write 2 1.0 JB max Pleaness Response 10 kHz - 250 MHz instrumented Prequency Response 10 kHz - 250 MHz instrumented Hermanics of the State of th

54 dBm typ.

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

17 / O FIL, sugge planet, 240 wates mac.
Connectors
RF Input
RF Output
Tippe N f
Cooling
Forced air
Weight
Size (WxHxD)
50.3 x 15.5 x 30 cm / 19.8 x 6.1 x 11.8 in
Rack Mountable



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



75 watts CW. 10 kHz-250 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 100 watrs / Min. 75 watts
Power Output @ 1dB compression
Nominal 70 watts / Min. 50 watts 75 watts 1.0 milliwatt mov

±1.0 dB max.

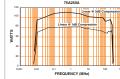
10 kHz - 250 MHz instantaneously
49 dB min.
atinuous range) 18 dB min. Flatness ± 1.0 dB max.
Frequency Response 10 kHz - 250 MHz instantaneously
Gain (at max. setting) 49 dB min.
Gain Adjustment (continuous range) 18 dB min.
Input Impedance 50 ohms, VSWR 1.5:1 max.
50 ohms, VSWR 2.0:1 max.

Imple non-conOutput Impediate

50 chuns, VSWR 24x1 nonOutput Myster
Memory
Memory Primary Power 90 - 135 / 180 - 270 VAC 47 - 63 Hz, single phase, 400 watts max.

47 - 63 Hz, single phase, 400 watts max.

Connectors
RF Input
RF Output
RF Output
RF Output
Remote Interfaces
1EEE-488
RS-322
9 pin Subministrate D female
Cooling
Forced air (self contained)
Weight
20.5 kg (45 lb)
S0.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in
RS-24 Mountable





100 watts CW. 10 kHz-250 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 157 watts /Min. 125 watts
Power Output @ 1dB compression
Nominal 107 watts / Min. 75 watts

Power Output (g) san source.

Nominal 107 worts / Man. 75 warts

Flatness

Flatness

10 HHz - 250 MHz instantaneously
Gola (at max. setting)

So dham, NSWB 1.51 max.

Output Impolance

50 ohms, NSWB 1.51 max.

Output Impolance

50 ohms, NSWB 2.61 max.

Mismach ToBernes without fidelined. Will operate without
damage or socillation with any magnitude and phase of source
and Isod impolance

Will fainfidingly expender. AM EM, or pulse modulation
appearing on the input signal. AM peak envelope power
limited to specified power.

Noise Figure (above 1.0 MHz)

Harmonic Distortion

Minus 20 dB; max. 47 souts

Thad Oder Intercept Point

55 dBm sp.

**Common Point St. 10 max.

56 dBm sp.

**Common Point St. 10 max.

St. 20 max.

Minus 20 dB; max. 47 souts

Thad Oder Intercept Point

55 dBm sp.

**Common Point St. 20 max.

St. 20 max.

St. 21 max.

St. 21 max.

Minus 20 dB; max. 47 souts

Thad Oder Intercept Point

55 dBm sp.

**Common Point St. 20 max.

St. 21 max.

St. 22 max.

St. 22 max.

St. 22 max.

Minus 20 dB; max. 47 souts

St. 22 max.

St. 22 max.

St. 22 max.

St. 23 max.

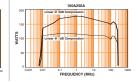
St. 24 max.

Minus 20 dB; max. 47 souts

Thad Oder Intercept Point

Third Order Intercept Point
Primary Power
90 - 135 / 180 - 270 VAC autoranging
47 - 63 Hz, single phase, 1000 watts max.

24 pin female 9 pin Subminiature D female 15 pin Subminiature D Forced air (self contained fans) 31.75 kg (70 lb) Cooling Forces Weight Size (WxHxD) 50.3 x 25.2 x 46 a19.8 x 9.9 x 18.1 in Rack Mountable



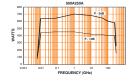
500A250A

500 watts CW. 10 kHz-250 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 500 watts / Min. 450 watts
Power Output @ 1dB compression
Nominal 400 watts / Min. 350 watts

Note that the second section of the second section of the second section of the second section of the section o

24 pin female on rear panel 9 pin female Type D on rear panel Type B female Forced air (self contained fans) Cooling Forced air Weight Size (WxHxD) 50.3 x 34 x 56.9 cm / 19.8 x 13.4 x 22 in Rack Mountable 45.8 kg (101 lb)





10 kHz to 225 MHz.

1000 watts CW. 10 kHz-225 MHz. 2500 watts CW. 10 kHz-225 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 1dB compression
Nominal 900 watts / Min. 700 watts
Flatness 1000 watts 1.0 milliwatt max. Plames ±0.5 dB max ±0.5 dB max 15 dB

appearing on the input signat, one joan to limited on specified power. Harmonic Distortion Minus 20 dlR max. at 750 watts Third Order Instructory Foint RF Newer Display 0 - 2000 watts full scale Publis Make Goning Characteristics Rise Time 0 - 2000 watts full scale Rise Time 0 - 20

Type N female on rear panel Type 7-16 DIN Female, rear panel Type BNC female on front panel Type BNC female on front panel

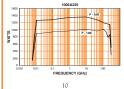
47 c.5 II., sumps, inconCommentors

SCOU costin max of 39 Et typ.

Commentors

Typ e N famale on trait

Typ e N famale





| 2500 watts, 10 kHz - 50 MHz | 2500 watts, 50 MHz - 225 MHz | 2500 - 1900 watts, 50 MHz - 225 MHz | (derating slope of 3.43 watts)MHz | Input For Rated Output | 1.0 mW max.

± 3.5 dB max. ± 0.8 dB with internal leveling tesponse 10 kHz - 225 MHz instantaneously x. setting) 64 dB min. Flatness = 0.8 fb with internal leveling.

Frequency Reponse 10 HH - 225 MH institutionwoodly
Gain (at max. setting) 10 HH - 225 MH institutionwoodly
Gain (at max. setting) 16 db min.
Input Impedance 50 chms, VSWR 2.01 max.
Output Impedance 50 chms, VSWR 2.01 max.
Output Impedance 50 chms, visit (at max. point in Minatch Tollerance) 50 chms, rominal
Minatch Tollerance without failabled up to 6.01 minatatch,
above which may limit to 1250 watts reflected power.
Modulation Capablety.
Will initiatily reproduce AM, FbA or pulse modulation
appearing on the print signal. AM peak cerevlepe power
limited to specified power.
Harmonic Distortion Minata 20 dbc max. at 1600 watts

limited to specified power
Harmonic Distortion Minus 20 dBc max. at 1600 watts
Ff tower Display 0 - 20 - 2000 watts full scale
Pulse Mode Gating Characteristics
Signal (into 50 oftan) 4-2.0 to 60 VDC
Rise Time 5 - 5 oftan - 20 ofta

187 - 289 VAL 37 MAN - 37 MAN

10 kHz to 220 MHz. 10 kHz to 100 MHz.

150A220

150 watts CW. 10 kHz-220 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 250 watts / Min. 150 watts
Power Output @ 1dB compression
Nominal 200 watts / Min. 150 watts

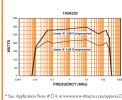
Power Output (%) Idll compression
Nominal 200 with 5 Min 150 wates
Dates Min. 150 wass...

10 kHz - 220 MHz instantaneously
53 dB min.
18 dB min.

Third Order Intercept Point RF Rise Time (10% to 90%) Primary Power 115 - 230 VAC 50 / 60 Hz, single phase, 1500 watts max.

SO (00 FI), single plause, 1900 wates link.

Connectors
RF Input
RF Output
RF Output
RF Output
Tipe NV.
Cooling
Forced Air
Weight (approximate)
Size (WAHAD)
Size (WAHAD)
Rock Mountable Type BNC female on front panel Type N female on front panel 25 Pin subminiature D Forced Air (self-contained fans) 47 kg (105 lb)



150A100B

150 watts CW. 10 kHz-100 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 220 watts / Min. 180 watts
Power Output @ 1dB compression
Nominal 155 watts / Min. 125 watts

±1.5 dB max ± 1.5 dB max.

10 kHz - 100 MHz instantaneously
52 dB min.
e
18 dB min.
50 ohms, VSWR 1.5:1 max.
50 ohms, VSWR 2.0:1 max.

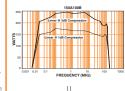
Plattiess 20 (1994). The Prespency Response 10 kHz - 100 MHz Institution accorded Gain (1994). The Control Adjustment Range 50 chms, VSWR 2.61 min Control Harmonic Monards Thermon² 10 (1994). The Control Harmonic Monards Thermon² 10 (1994) of rated power without full-wide and phase of source and load impedance.

Modulation Capadinic with any magnificiate and phase of source and load impedance.

Modulation Capadinic with Application with any magnificial with the Control Harmonic Plattice of the Control Harmonic Distortion (1994). The Control Harmonic Distortion (1994) of different particular specifical power.

Noise Figure (above 1.0 MHz) 6 dB try Platting 1994 (1994). The Control Harmonic Distortion (1994). The Control Harmonic Platting 1994 (1994). The Control Harmonic Platting 1994

onnectors RF Input RF Output 24 pin male 9 pin Subminiature D male 15 Pin Subminiature D Forced air (self contained fans) 31.75 kg (70 lb) Safety Interlock Sarety merrocx 13
Cooling Forced air
Weight
Size (WxHxD)
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in
Rack Mountable



3500A100A

3500 watts CW. 10 kHz-100 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 3000 watts / Min. 2700 watts
Power Output @ 1dB compression
Nominal 2500 watts / Min. 2000 watts

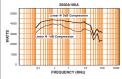
Nominal 2500 watrs /Min. 2000 watrs
Flatness ± 1.5 dB max/: 0.5 dB with internal leveling
Frequency Response
10 kHz: 100 MHz instantaneously
Gain (at max. setting)
20 dB min.
Gain Adjustment (continuous range)
10 put Imput Impedance
50 ohms, VSWR 1.5± max.
50 ohms, VSWR 1.5± max.

Output Impedance 50 chms, VSWR 2.5:1 max. Missatch Takenace*
Modulation Cappillary
Wall fairfally reproduce AMF Mr. or pulse modulation appearing on the prost signal. AM prack envelope power limited to specified power
Harmonic Distortion
Missatch Missatch Takenace*
Missatch Take 73 dBm typ. 0 - 5000 watts full scale

+2.0 to 6.0 VDC 0.5 microseconds max. 0.5 microseconds 10 nanoseconds max.

Rise Time
Bell Time
RF RaseFull Time
10 nanos...
Primary Power (near must specify)
180 - 267 VAC Debta (4 wire)
180 - 267 VAC Wey 6 year)
180 - 457 VAC Wey 6 year)
180 - 458 VAC Wey 6 year
180 - 458 VAC Wey 6 year
180 - 180 VAC Wey 6 year
180 - 180 VAC Wey 6 year
180 VAC Wey 180 VAC

Cooling Forced air Weight Size (WxHxD) 56.2 x 152 x 100 cm / 22.1 x 60 x 39.4 in

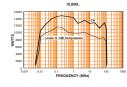




10,000 watts CW. 10 kHz-100 MHz. Rated Output Power
Nominal
Min.
Linear @ 1dB compression 12,600 watt Min. 10,000 warts Linear @ 1dB compression 10,100 warts Linear @ 1dB compression 7500 warts min. Flatness 1500 warts min. Flatness 10 warts with the program of the principal of the program of the program of the principal of the princ

Type BNC female on front panel Type EIA 15/8 male on rear panel Type BNC female on front panel 25 pin female subministrure D on rear panel Tap water, 20-30 LPM (68 GPM) at 20° C max. Air-cooled option available. 1134 kg (2500 lb)

Cooling Size (WxHxD) 68.8 x 149.9 x 82.6 cm / 27.1 x 59 x 32.5 in





100 watts CW. 100 kHz-400 MHz.

100 kHz to 400 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 130 watts / Min. 100 watts
Power Output @ 1dB compression
Nominal 100 watts / Min. 75 watts ±1.5 dB max requency Response 100 kHz - 400 MHz instantane Sain (at max. setting) 100 kHz. 400 MHz instantaneously
Goin far max, settinging 50 dB min.
Goin Adjustment (continuous range)
100 dB min.
John Mighstenert (continuous range)
100 db min, VSWR 1.51 lim.
Longut Impedance
50 ohms, VSWR 1.61 si max.
Loutgut Impedance
100% of rated power without foldrack. Will operate without
damage or collisition with any magnitude and plause of source
damage or collisition with any magnitude and plause of source
Will installing typeroduce AM, EM, or pulse modulation
appearing on the input signal. AM peak envelope power
Imited to specified power
Harmonic Distortion
Minus 20 dB max. at 75 watts
Third Ohele Intercept Plant
50 dBm typ.
Primary Power

Onnectors RF Input RF Output

Remote Interfaces IEEE-488 RS-232 Safety Interlock 9 pin Subminiature D female 15 pin Subminiature D Forced air (self contained fans) 36 kg (80 lb)

Cooling Forced air Weight Sire (WxHxD) 50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in



150 watts CW. 100 kHz-400 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 155 wasts / Min. 130 watts
Power Output @ 1dB compression
Nominal 125 watts / Min. 100 watts ±1.5 dB max Flatness
Frequency Response
100 kHz - 400 MHz ins
Gain (at max. setting)
Gain Adjustment Range
Input Impedance 20 dB min 50 ohms, VSWR 1.5:1 max Output Impedance 50 ohms, round Mismatch Tolerance* 50 ohms, nomin Mismatch Tolerance* 100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

and load impedance.

Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation
appearing on the input signal. AM peak envelope power
limited to specified power.

Harmonic Distortion
Minus 20 dBc max. at 10
Third Order Intercept Point
Prinary Power

Type N female on front panel Type N female on front panel

47 - 64Hz, single phase, 1000 watts max.

Connectors

RF Inguist

RF Inguist

RF Inguist

RF Inguist

RF Inguist

RF 222

9 pin Su

Safesy Interlock

15

Cooling

Forced air

Weight

SGJ x 35.2 x 46 cm / 19.8 x 9.9 x 18.1 in

Rack Mountable 24 pin female 9 pin Subminiature D female 15 pin Subminiature D Forced air (self contained fans) 36 kg (80 lb)



100 kHz to 250 MHz.



Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 180 watts / Min. 155 watts
Power Output @ 1dB compression
Nominal 150 watts / Min. 120 watts

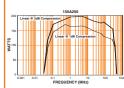
±1.5 dB max.

Frequency Response 100 kHz - 250 MHz instantaneously Gain (at max. setting) Gain (at max. setting) 5.2 dB min Input Impedance 50 chms, VSWR 1.5:1 max Output Impedance 50 chms, VSWR 1.5:1 max Output Impedance 50 chms, VSWR 1.5:1 max Output Impedance 50 chms, VSWR 2.0:1 max Output Impedance 60 chms, VSWR 2.0:1 max Output Impedance or oscillation with any magnitude and phase of source and load impedance. 20 dB min. 50 ohms, VSWR 1.5:1 max. 50 ohms, VSWR 2.0:1 max.

Harmonic Distortion Minus 20 dBc max. at 120 watts
Third Order Intercept Point 58 dBm typ.

RF Input RF Output temote Interfaces IEEE-488 RS-232

24 pin female
9 pin subminiature D female
15 pin subminiature D
Forced air (self-contained fans) Weight
Size (WxHxD)
50.3 x 25.2 x 46 cm / 19.8 x 9.9 x 18.1 in
Rack Mountable



5000A250A ----

150 watts CW. 100 kHz-250 MHz. 5000 watts CW. 100 kHz-250 MHz. 10,000 watts CW. 100 kHz-250 MHz.

Rated Output Power 5000 watts, 100 kHz - 100 MHz 5000 - 3000 watts, 100 MHz - 250 MHz

Rated Output Power

500 warts, 100 H±- 100 MH±
Input For Rated Output
500 -300 varst, 100 MH±- 250 MH±
Prover Output 61 dB compression

100 H±- 250 MH±
Proguency Response
100 H±- 250 MH± instantaneously
Flaress max. setting continuous range)
100 H±- 250 MH± instantaneously
Flaress max. setting continuous range)
100 H±- 250 MH± instantaneously
100 mm output
100 mm

mmtted to specified power.
Harmonic Distortion Minus 20 dBc max. at 3000 watts
Thirld Order Intercept Pint 74 dBm typ.
RF Power Display 0 - 7500 watts full scale
Pulse Mode Gating Characteristics
Signal (into 50 clam) + 2.0 to 6.0 VIVC + 2.0 to 6.0 VDC 0.5 microseconds max. 0.5 microseconds 10 nanoseconds max.

RF Rise/Fall Time Nr. Kusertall Time 10 nanoe Primary Power (user must specify) 200 - 240 VAC Delta (4 wire), Wye compatible 346 - 416 VAC, Wye (5 wire) 400 - 480 VAC Delta (4 wire) Wye compatible 47 - 63 Hz, 3 phase, 20,000 watts max.

47 - 69 Hz., p shase, 20,000 wates max.

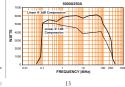
Grandeton.

BF Output

Fig. BA 1.58 male on rour panel

Figs. BNC formal or from panel

Figs. BNC female or from pane



10000A250A



Rated Output Power 10,000 watts, 100 kHz - 100 MHz 10,000 - 6,000 watts, 100 MHz - 250 MHz

Rated Output Power

10,000 watts, 100 kHz - 100 MHz
Input For Rated Output

10,000 - 6,000 watts, 100 kHz - 250 MHz
Input For Rated Output

10,000 - 6,000 watts, 100 kHz - 250 MHz
Input For Rated Output

10,000 watts, 100 kHz - 250 MHz
Input For Rated Output

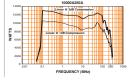
10,000 watts, 100 kHz - 100 MHz
Input For Rated Output

10,000 watts, 100 kHz - 100 MHz
Input For Rated Output

10,000 watts, 100 kHz - 100 MHz
Input Inpu

47 - 63 Hz. 3 piases, 40,000 wants bases.

Type N female on rear panel
RF Inpart
Type RM 1, 158 male on rear panel
Type RM 1, 158 male on rear



100 kHz to 1000 MHz. 500 kHz to 1000 MHz. 1 to 1000 MHz.



1 watt CW. 100 kHz-1000 MHz.

Rated Output Power Input For Rated Output Power Output @ 3dB compression Nominal 2.5 watts / Min. 1.0 watts Power Output @ 1dB compression Nominal 2 watts / Min.1.0 watts

Forest Online (i) the Companies of the State Sta

Primary Power 90 - 264 VAC 47 - 440 Hz, single phase, 60 watts max.

Type N female on front panel Type N female on front panel Forced air (self-contained fan) 4.5 kg (10 lb) Cooling Forced at Weight
Size (WxHxD)
26 x 11.7 x 21.6 cm / 10.3 x 4.6 x 8.5 in Rack Mountable



10 watts CW. 500 kHz-1000 MHz.

And the rest restrict of a did not make setting of a did not make a did not make setting of a di

Primary Power 90 - 132, 180 - 264 VAC 50 / 60 Hz, single phase, 300 watts max.

onnectors RF Input RF Output

RF Output Type N fem
Remote Interfaces
IEEE_488
RS_232 9 pin Subn
RS_232 9 pin Subn
Safety Interlock 15 Pi
Coolling Forced air (s
Weight
S3.3 x 155 x 37.6 cm / 19.8 x 6.1 x 14.8 in. 9 pin Subminiature D female
15 Pin Subminiature D female
15 Pin Subminiature D
Forced air (self contained fans)
20.5 kg (45 lb)

14

9 8 0 BB T 8 64

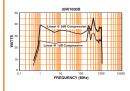
30W1000B

30 watts CW. 1-1000 MHz. Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 36 watts / Min. 30 watts
Power Output @ 1dB compression
Nominal 27 watts / Min. 20 watts

Frequency Response C 1-1000 MHz instantaneousl Goin for max. serting)
Goin Adjustment (continuous range)
20 dli mini (4058 steps semose)
lapst Impedance
50 chms, vSWR 2.0:1 max
Onsput Impedance
50 chms, vSWR 2.0:1 max
Onsput Impedance
Mismatch Tolerance
Mismatch Tolerance
Mismatch Tolerance
and India of myclastic and place of source
and lead impedance
Will individual reproduce AM, PM, or pulse modulation
appearing on the input signal. AM preak envelope power
limited to specified power
Harmonic Distortion
Misma 20 dBc max. at 25 wart
Third Order Intercept Point
7 Printary Power

1 Printary Power 50 ohms, VSWR 2.0:1 max.

| Section | Sect



1 to 1000 MHz.

80 to 1000 MHz.



50 watts CW. 1-1000 MHz.

Rated Output Power Input For Rated Output Power Output @ 3dB compression Nominal 70 watts / Min. 50 watts Power Output @ 1dB compression Nominal 55 watts / Min. 40 watts

±1.0 dB typ. / ±1.5 dB max. 1 - 1000 MHz instantaneously 47 dB min.

Frequency Response 1 Gain (at max. setting)
Gain Adjustment (continuous range)
20 dB min. (4096 steps remote) 50 ohms, VSWR 2.0:1 max

20 db min. (459 steps remote)
Input Impedance
50 ohms, VSWR 2.0:1 mas
Output Impedance
50 ohms, nomine
Mismatch Tolerance*
10% of rated power without foldback. Will operate without
damage or oscillation with any magnitude and phase of source
and load Impedance.

and load impedance.

Modulation Capability
Will initiality repoduce AM, FM, or pulse modulation
appearing on the input signal. AM peak envelope power
limited to specified power.

Harmonic Distortion
Minus 20 diffe max. at 50 watts

Third Order Intercept Point 57 diff

Primary Power 90 - 132, 180 - 264 VAC 50 / 60 Hz, single phase, 600 watts max.

Connectors RF Input RF Output

RF Output Type N fe
Remote Interfaces
IEEE_488
RS-232 9 pin Sub
Safety Interlock 151
Coolling Foxced air (
Weight
50.3 x 20.3 x 45.7 cm / 19.8 x 8 x 18.1 in 24 pin female 9 pin Subminiature D female 15 Pin Subminiature D Forced air (self contained fans) 25.9 kg (57 lb) Rack Mountable



100 watts CW. 1-1000 MHz.

Rated Output Power Input For Rated Output Power Output @ 3dB compression Nominal 123 warts / Min. 100 wat 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

and load Impedance.

Modulation Capability
Will infatfully reproduce AM, EM, or pulse modulation
appearance on the input signal. AM peak envelope power
limited to specified power

Harmonic Disortion

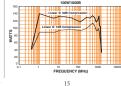
Third Order Intercept Point

St dlbs ray.

0 - 202 to sust.

Primary Power 90 - 264 VAC 47 / 400 Hz, single phase, 1200 watts max. Connectors RF Input RF Output

24 pin female 9 pin Subminiature D female Type BNC on front panel 15 pin Subminiature D Forced air (self contained fans) 40 kg (88 lb) Size (WxHxD) 50.3 x 24.9 x 53 cm / 19.8 x 9.8 x 21.1 in





150 watts CW. 80-1000 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 140 watts / Min. 120 watts
Power Output @ 1dB compression
Nominal 120 watts / Min. 100 watts

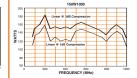
Flatness ±2.0 dB max. / 1.5 dB typ. ±0.8 dB with internal leveling Frequency Response 80 - 10 Gain (at max. setting)
Gain (at max. setting)
Gain Adjustment (continuous range)
18 dB min. (4096 steps remote)
Input Impedance 50 80 - 1000 MHz instantan

50 ohms, VSWR 2.0:1 max. Output Impedance Mismatch Tolerance* Will operate with

Output Impectance
Minimach Tolerams of manage or oscillation with any magnitude raily of the place of source and food impedance.
Will limit reflected power to 100 waters will limit reflected power to 100 waters.
Modulation Capability will instructed power to 100 waters will limit reflected power to 100 waters with the properties of th

Connectors RF Input RF Output demote Interfaces IEEE-488 RS-232 ALC & Pulse Type N temate on non-parameter 9 pin Subminiature D female
Type BNC on front panel
15 pin Subminiature D
Forced air (self contained fans)
40 kg (88 lb)

| 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170 | 170





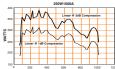
250 watts CW. 80-1000 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 310 watts / Min. 250 watts
Power Output @ 1dB compression
Nominal 255 watts / Min. 200 watts

Gain Adjustment (continuous range)
15 dft min (Web step semente)
18 put Impedance
50 chms, repealed
10 chuyu Impedance
50 chms, remin Misuatch Tolerance*
50 chms, remin Misuatch Tolerance*
10 chs of rand power without feldback. Will operate without damage or oscillation with any magnitude and phase of source Modulation of the continuous damage or oscillation with any magnitude and phase of source Modulation appearing on the input signal. AM peak envelope power limited to specified power
1 mine 20 dft max. at 200 waters
1 m 62 dBm tvp.

Connectors RF Input RF Output

RF Ourput Type N
Remote Interfaces
IEEE-488
RS-212 9 pin
RS-212 9 pin
ALC & Pulse 5 C
Safety Interfacek 15 pin submit
Cooling Forced of
Weight
Stee (WaPkD)
50.3 x 47 x 61 cm / 19.8 x 18.5 x 24 in 24 pin female
9 pin subminiature D female
ST Comn Tx and Rx RS-232
Type BNC on front panel
15 pin subminiature D on rear panel
Forced air (self contained fans)
86.2 kg (190 lb)



500W1000A

500 watts CW. 80-1000 MHz.

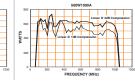
Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 612 watts / Min. 450 watts
Power Output @ 1dB compression
Nominal 515 watts / Min. 350 watts 525 watts min. 1.0 milliwatt max

Power Output @ 1.4B compression
Nominal 51 St usits / Min. 350 watts / Min. 180 with internal leveling
Platinss 2.20 dB max. / ±0.8 db with internal leveling
Frequency Response
8 0.1000 MHz instantaneously
Gain (at max. setting)
Gain Adjustment (continuous range)
Gain Adjustment (continuous range)
Gain Adjustment (continuous range)
Output Impedance
90 ohns, VSW 2.61 max.
Sol chins, nominal
Mismodi Falentine
Sol chins, nominal
Mismodi Falentine
Mismodi Falentine
Sol chins, nominal
Mismodi Falentine
Wall operate without failthack up to 6.01 mismatch
above, with nhw pulm to 250 water effected power
Wall operate without damage or oscillation with any magnitude
and phase of source and load impedance.
Modulation Capability

50 /60 Hz, single phase, 6500 VA max.

Tipe N female on rear panel figure Section High Control Factornal Leveling Imputs Detected RF Output Sixtley Interfock. Sixtley Interfock. Remnee Computer Interface Interface and Sixtley Sixt

ST Conn Tx and Rx RS-232 Forced air (self contained fans) 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
Input For Rated Output
Power Output @ 3dB compression
Nominal 1150 watts / Min. 850 watts
Power Output @ 1dB compression
Nominal 920 watts / Min. 700 watts

Connectors
RF Input
RF Output
External Leveling Inputs
Pulse Modulation Input
Detected RF Output
Remote Computer
Interface Type N female on rear panel Type 7/16 female on rear panel Type BNC female on front panel Type BNC female on front panel Type BNC female on front panel

Remote Computer Interface (filter optic)
Safety Interface
Operate Interface
Cooling
A S-232 connectors on isom jumiliarity
ST Conn Tx and Rx RS-232
Safety Interface
12 pin subminisature D on rear panel
Forced air cell' contained fans)
Forced air cell' contained fans)
43 (kg (750 lb) Cooling Forced air (s Weight (approximate) Size (WxHxD) 68.8 x 152.5 x 82.5 cm / 27.1 x 60 x 32.5 in 340 kg (750 lb)

1350 1200 1050 \$200 \$200 \$750 \$600 450 300

16

80 to 1000 MHz.

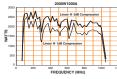
2000W1000A

Power Output 69 IdB compression
Nominal 1789 with Min. 1200 wats
Flatness 2.5 45 max. / 20.5 db with internal leveling
Flatness 2.5 45 max. / 20.5 db with internal leveling
Flatness 2.5 45 max. / 20.5 db with internal leveling
Gain (Almanus straing)
18 db min.
Input Impedance
90 chans, ySWR 2.04 max.
Output Impedance
95 chans, ySWR 2.04 max.
Output Impedance
95 chans, ySWR 2.04 max.
Output Impedance
95 chans, ySWR 2.04 max.
With a proper without fiddlesd; up to 6.0.1 mismatch
above, which may limit to 959 watts reflected power Will
operate without change or oscillation with un paraginule and
operate without change or oscillation with un paraginule and
will intitled in prediction of the proper of the properties.
Modulation Capability
Will intitled in predicted power
Harmonic Distortion
Minus 20 dBe max. at 1500 warts
Third Order Intercept Point
70 dBn npy
87 Power Display
Flower Order Strain
Schotlass (4 wire)
200 - 250 VAC, Delta Cannected (4 wire)
200

somectors
RF Input
RF Output
External Leveling Inputs
Pulse Mediatation Input
Detected RF Output
Safety Interiock
Safety Interiock
Jpe BNC female on front panel
Type BNC female on front panel

24 pin female IEEE-488.2 (GPIB)

Remote Computer
Interface (fiber optic)
sooling
ST Conn Tx and Rx RS-232
Forced air (self contained fans)
Seight (approximate)
S9 kg (1850 lb)





3000 watts CW. 80-1000 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 3000 waters /Min. 2200 watts
Power Output @ 1dB compression
Nominal 2500 watts / Min. 1750 watts

Nominal 2500 watrs / Min. 1730 wats
Flatness 2-2.5 dB max. / 2048. dB with internal leveling
Frequency Response
80 - 1000 MHz instantaneously
Gain (at max. setting)
18 dB min.
Gain Adjustment (continuous range)
18 dB min.
Input Impedance
50 chms, VSWR 2.61 max.
50 chms, Nominal

Input Impedance 50 ohms, INSW & 2.01 max.

Output Impedance 50 ohms, ONW & 2.01 max.

100 in of rate flower without foldfack up to 6.02 mismatch alove, which may limit to 1500 water reduced power will opened without damage or cellation with any will opened without damage or cellation with any will opened without damage or cellation with any Will fastfalish proportion eAM. Bot for top use modulation appearing on the input signal, AM peak envelope power lamined to specified power.

Harmonic Distortion Minus 20 dRe max. at 2150 wates that Only of the Company of the Company

20 / 10 vtt.) justices

Connectors

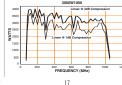
Connectors

RC Output

External leveling inputs
Pulse moddatrion input
Pulse moddatrion input
Detected RF Output

External leveling inputs
Fig. 18 NC female on front panel
Type RNC female on front panel
Type N female very fine 1.5 pen female submittation to 1.5 pen female s

Remote Computer Interface 24 prin female CPIRIEEE 488 and 9 pin RS-232 connectors on rear panel Interface (fiber optic) ST Conn Tx and Rx RS-21C coling Forced air (self contained flax). Weight (approximate) 1453 kg (2625 lb)



4000W1000

4000 watts CW. 80-1000 MHz.

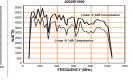
Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 4400 watts / Min. 2800 watts
Power Output @ 1dB compression
Nominal 3400 watts / Min. 2200 watts

Notes and the second se

damage or occillation with any negamon—
and load impediation Capability
Modulation Capability
Will intitudin yerochace AM EM, or pulse modulation
appearing on the input signal. AM peak envelope power
limited to specified power.
Harmonic Distortion Minus 20 dBc max a 2800 watts
Third Order Intercept Point
73 dBm typ.
RF Power Display
0 - 6000 watts

Remote Computer
Interface and 9 pin RS-232 connectors on rear panel
Remote Computer
Interface (fiber optic)
ST Conn Tx and Rx RS-23 connectors on rear panel
Forced air (self contained final)
Forced air (self contained final)
Forced air (self contained final)
ST Conn Tx and Rx RS-23 connectors on rear panel
Forced air (self contained final)
ST Conn Tx and Rx RS-23 connectors on rear panel
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ST Conn Tx and Rx RS-23 connectors on rear panel
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ST Conn Tx and Rx RS-23 connectors on rear panel
ST Conn Tx and Rx RS-23 connectors on rear panel
ST Conn Tx and Rx RS-23 connectors on rear panel

Size (WxHxD) (5 cabinets) 340 x 158 x 163 cm / 134 x 62 x 64 in



DC to 1000 MHz.



10 watts CW. dc-1000 MHz.

Flatness ±1.0 dB typ. / ±1.5 dB Frequency Response DC - 1000 MHz (In two bands selected automatically manually or buss)

manually or bass)

Gain 40 dB min.
Input Impedance 50 ohms, VSWR 2.61 ms.
Chapte Impedance 50 ohms, VSWR 2.61 ms.
Mismach Tolerance*
10% of rated Tolerance without damage or oscillation or foldback with any magnitude and phase of source and load impedance.

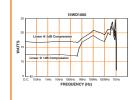
and load impedance.

Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation
paperating on the pure signal. AM peak envelope power
limited to specified power
Harmonic Distortion
Minus 20 dBc max. at 10 watts
Third Other Intercept Point
Pilmary Power

55 - 264 VAC.

37 - 440 Hz, S50 watts max.

| 17 - 174 | Tr. | 3.0 waits mix.
| Connectors | FF | Input | Type N female on front panel | FF | Output | Type N female on front panel | FF | Output | Type N female on front panel | FF | Output | Type N female on front panel | FF | Output | Type N female on front panel | Type N female | Type N female on front panel | Type N female on fron Pype N semane 24 pin female
9 pin Subminiature D female
15 Pin Subminiature D
Forced air (self contained fans)
20.5 kg (45 lb) afety Interlock Succy metrock
Cooling Forced air (s
Weight
Size (WxHxD)
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in
Rack Mountable





50 watts CW. dc-1000 MHz.

Rated Output Power
Input For Rated Output
Power Output @ 3dB compression
Nominal 60 watts / Min. 40 watts
Power Output @ 1dB compression
Nominal 50 watts / Min.30 watts 50 watts min. 1.0 milliwatt max

±1.0 dB typ. / ±1.5 dB max Flatness ±1.0 dB typ. / ±1.5 dE Frequency Response dc - 1000 MHz (in two bands selected automatically or manually)

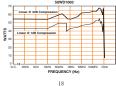
manually

Gain 47 dB.
Input Impedance 50 ohms, VSWR 2.2.1:
Output Impedance 50 ohms, VSWR 2.2.1:
US% of rated output power. Will operate without damage or oscillation with any magnitude and phase of source and lood impedance.

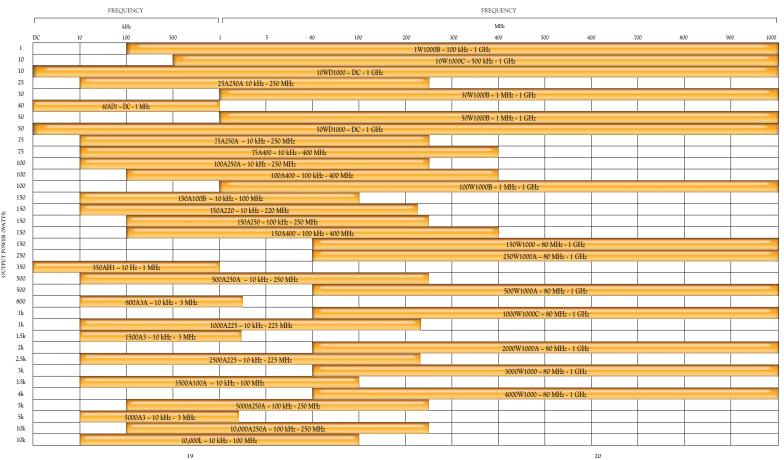
lood Impoclance.

Modulation Capability
Will faithfully reproduce AMF Bd, or pulse modulation
appearing on the pure signal. AM Pauk envelope power
limited to specified power
Harmonic Distortion
Minus 20 dlle max. at 35 watts
Thad Oxbe Intercept Paint
Primary Power
20 45 (20 Hz, single phase, 700 watts max.

Connectors RF Input RF Output Remote Control Type N female on front panel
Type N female on front panel
25 Pin Submittature D on rear panel
Forced air feelf committed female | 25 Pin Subministrue D on re-Cooling | Forced air (self contain | Weight | 29 kg | Size (WxHxD) | 50.3 cm x 24.9 cm x 45.7 cm / 19.8 in x 9.8 in x 18 in | Rack Mountable Forced air (self contained fans) 29 kg (64 lb)



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20

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