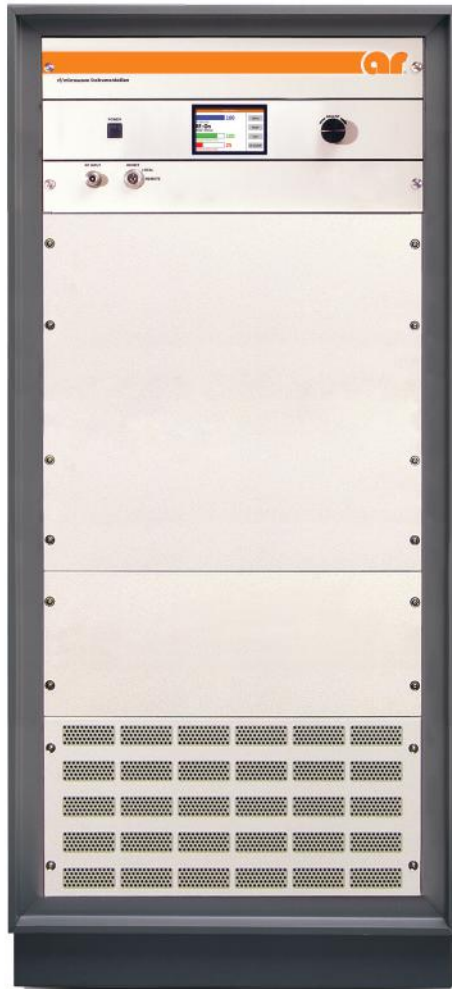


Performance & Reliability That Exceed Your Highest Expectations

Newest Additions To Our Microwave Solid State Amplifiers:
“S” Series 0.7 To 6 GHz, 175 Watt CW Class A Amplifier;
And 6.0 To 18 GHz, 20 and 40 Watts CW Class A Liquid Cooled Amplifiers
For Immunity Testing, Wireless Testing & EW Applications

500S1G6A
500 Watts Class A CW
0.7-6.0 GHz



“ This amplifier (500S1G6A)
really is a life saver for RI, given
its power and frequency range. ”

Chad Redman, Type Test Technician
Pullman, WA
Company: Schweitzer Engineering Labs



We don't just build great products.
We build great products that last.

40S6G18-L
40 Watts CW
6.0-18 GHz



Our “S” Series Solid State Amplifiers Provide 100% Of Rated Power Without Foldback

Others talk about advanced technology, AR delivers. We created the first single band 0.7 to 6 GHz power amplifiers with output powers from 15 to 500 watts. There’s no need to switch between amplifiers/bands to provide power to the load. You use less power and save more money.

These innovative Class A amplifiers offer low harmonic distortion, ∞ :1 mismatch capability and excellent noise figures for your most demanding EMC or Wireless applications.

Extensive control and status reporting capabilities are available both locally and remotely. The touch-screen panels are intuitive, convenient, and easy to use.

AR Amplifiers Use The Latest Technology

- Producing more power in a smaller package compared to the competition.
- Internal self-contained liquid cooling technology.

Reduced Power Consumption

- This results in a greener product by saving on input power, and on lower cooling needs.

AR Quality Built Into Every Amplifier

- Designed for years of use.

Wide Instantaneous Bandwidth

- Allows for continuous testing without interruption associated with switching of amplifiers, while also providing the user with a lower overall cost when compared to 2 amplifiers and a switch.

Low Spurious Signal Levels

- Makes these amplifiers ideal for use as a driver amplifier for wireless, communication component, and subsystem testing.

2000S1G2z5
2000 Watts CW
1.0-2.5 GHz



Watch Our Product Demo



Visit www.arworld.us/6to18 to view a demo of AR’s New 6-18 GHz Amplifier Series or scan this page with the Layar app to watch on your mobile device.

Microwave Solid State Amplifiers

0.7 to 4.2 GHz

20S1G4 Solid State Amplifier



20 watts CW, 0.7-4.2 GHz

Rated Power Output	20 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	Nominal 25 watts / min. 20 watts
Power Output @ 1dB compression	Nominal 22 watts / min. 18 watts
Flatness	± 1.5dB typ. / ± 2dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	43dB min.
Gain Adjustment (continuous range)	10dB 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. * See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Harmonic Distortion	Minus 20dBc max. at 20 watts
Spurious	Minus 73dBc typ.
Third Order Intercept Point	52dBm typ.
Noise Figure	10dB typ.
Primary Power (selected automatically)	90 - 132, 180 - 264 VAC 50/60 Hz, single phase 210 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) RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	16.8 kg (37 lb)
Size (WxHxD)	50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in.

40S1G4 Solid State Amplifier



40 watts CW, 0.7-4.2 GHz

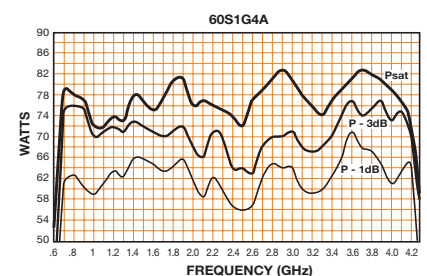
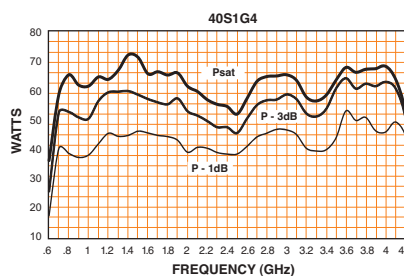
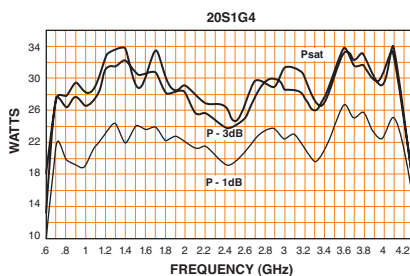
Rated Power Output	40 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	Nominal 50 watts / min. 40 watts
Power Output @ 1dB compression	Nominal 44 watts / min. 35 watts
Flatness	± 1.5dB typ. / ± 2dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	46dB min.
Gain Adjustment (continuous range)	10dB 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. * See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept	55dBm typ.
Harmonic Distortion	Minus 20dBc max. at 40 watts
Spurious	Minus 73dBc typ.
Noise Figure	10dB typ.
Phase Linearity	± 1 deg/100 MHz, typ.
Primary Power (selected automatically)	90 - 132, 180 - 264 VAC 50/60 Hz, single phase 285 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) RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	18.2 kg (40 lb)
Size (WxHxD)	50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in.

60S1G4A Solid State Amplifier



60 watts CW, 0.7-4.2 GHz

Rated Power Output	60 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	Nominal 70 watts / min. 60 watts
Power Output @ 1dB compression	Nominal 65 watts / min. 50 watts
Flatness	± 1.5dB typ. / ± 2dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	47.8dB min.
Gain Adjustment (continuous range)	10dB 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. * See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept	58dBm typ.
Harmonic Distortion	Minus 20dBc max. at 60 watts
Spurious	Minus 73dBc typ.
Noise Figure	10dB typ.
Phase Linearity	± 1 deg/100 MHz, typ.
Primary Power (selected automatically)	90 - 132, 180 - 264 VAC 50/60 Hz, single phase 415 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) RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	27.7 kg (61 lb)
Size (WxHxD)	50.3 x 20.3 x 54.6 cm / 19.8 x 8.0 x 21.5 in.



80S1G4 Solid State Amplifier



80 watts CW, 0.7-4.2 GHz

Rated Power Output	80 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 95 watts / min. 80 watts	
Power Output @ 1dB compression	
Nominal 85 watts / min. 70 watts	
Flatness	± 1.5dB typ. / ± 2dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	49dB min.
Gain Adjustment (continuous range)	10dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept	58dBm typ.
Harmonic Distortion	Minus 20dBc max. at 80 watts
Noise Figure	10dB typ.
Spurious	Minus 73dBc typ.
Phase Linearity	± 1 deg/100 MHz, typ.
Primary Power (selected automatically)	
90 - 132, 180 - 264 VAC	
50/60 Hz, single phase	
448 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)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	28.4 kg (62.5 lbs)
Size (WxHxD)	
50.3 x 20.3 x 54.6 cm / 19.8 x 8.0 x 21.5 in	

125S1G4 Solid State Amplifier



125 watts CW, 0.7-4.2 GHz

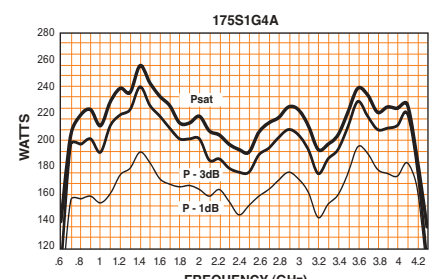
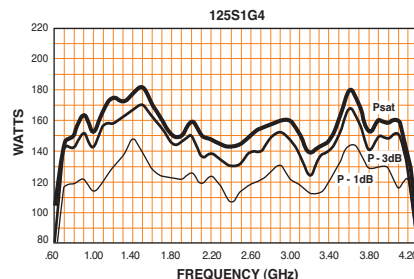
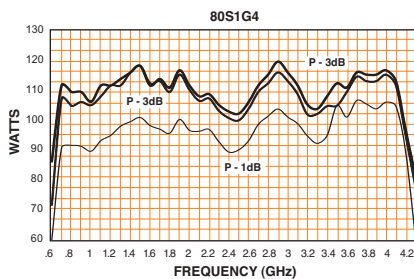
Rated Power Output	125 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 140 watts / min. 120 watts	
Power Output @ 1dB compression	
Nominal 120 watts / min. 100 watts	
Flatness	± 1.5dB typ. / ± 2dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	51dB min.
Gain Adjustment (continuous range)	15dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
RF Power Display	0 - 200 Watts
Third Order Intercept	61dBm typ.
Harmonic Distortion	Minus 20dBc max. at 115 watts
Spurious	Minus 73dBc typ.
Phase Linearity	± 1 deg/100 MHz, typ.
Primary Power (selected automatically)	
90 - 132, 180 - 264 VAC	
50/60 Hz, single phase	
900 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)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	44 kg (97 lb)
Size (WxHxD)	
50.3 x 30 x 61 cm / 19.8 x 11.8 x 24 in.	

175S1G4A Solid State Amplifier



175 watts CW, 0.7-4.2 GHz

Rated Power Output	175 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 190 watts / min. 160 watts	
Power Output @ 1dB compression	
Nominal 165 watts / min. 135 watts	
Flatness	± 1.5dB typ. / ± 2dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	52.5dB min.
Gain Adjustment (continuous range)	15dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
RF Power Display	0 - 200 Watts
Third Order Intercept	61dBm typ.
Harmonic Distortion	Minus 20dBc max. at 160 watts
Spurious	Minus 73dBc typ.
Phase Linearity	± 1 deg/100 MHz, typ.
Primary Power (selected automatically)	
90 - 132, 180 - 264 VAC	
50/60 Hz, single phase	
1050 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)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	45.4 kg (100 lb)
Size (WxHxD)	
50.3 x 30 x 61 cm / 19.8 x 11.8 x 24 in.	



250S1G4A Solid State Amplifier



250 watts CW, 0.7-4.2 GHz

Rated Power Output	250 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal	280 watts / min. 240 watts
Power Output @ 1dB compression	
Nominal	240 watts / min. 200 watts
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	54dB min.
Gain Adjustment	15dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
RF Power Display	Digital, forward and reflected
Third Order Intercept	64dBm typ.
Harmonic Distortion	Minus 20dBc max. at 225 watts
Primary Power	
120 - 240 VAC	
50/60 Hz, single phase	
1450 watts	
Connectors	
RF input	Type N female on front panel
RF output	Type 7-16 female on front panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin female Subminiature D on rear panel
Cooling	Forced air (self contained fans)
Weight	71.8 kg (158 lb)
Size (WxHxD)	
50.3 x 55.9 x 61 cm / 19.8 x 22 x 24 in.	

350S1G4A Solid State Amplifier



350 watts CW, 0.7-4.2 GHz

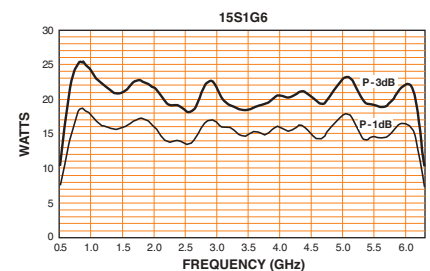
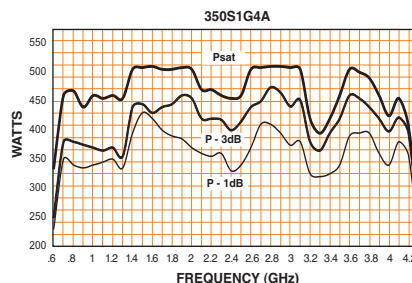
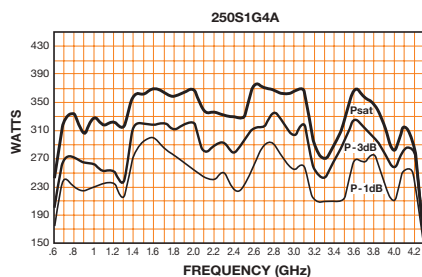
Rated Power Output	350 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal	375 watts / min. 320 watts
Power Output @ 1dB compression	
Nominal	325 watts / min. 270 watts
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	0.7 - 4.2 GHz instantaneously
Gain (at max. setting)	55.5dB min.
Gain Adjustment (continuous range)	15dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
RF Power Display	Digital, forward and reflected
Third Order Intercept	65dBm typ.
Harmonic Distortion	Minus 20dBc max. at 325 watts
Spurious	Minus 65dBc typ.
Primary Power	
120 - 240 VAC	
50/60 Hz, single phase	
1900 watts max.	
Connectors	
RF input	Type N female on front panel
RF output	Type 7-16 female on front panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin female Subminiature D on rear panel
Cooling	Forced air (self contained fans)
Weight	86.2 kg (190 lb)
Size (WxHxD)	
50.3 x 55.9 x 61 cm / 19.8 x 22 x 24 in.	

15S1G6 Solid State Amplifier



15 watts CW, 0.7-6.0 GHz

Rated Power Output	15 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal	20 watts / min. 15 watts
Power Output @ 1dB compression	
Nominal	15 watts / min. 12 watts
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	0.7 - 6 GHz instantaneously
Gain (at max. setting)	43dB min.
Gain Adjustment (continuous range)	10dB min. (4096 steps remote)
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Third Order Intercept Point	48dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	
Minus 20dBc max. at 15 watts (1 - 6 GHz)	
Minus 20dBc max. at 15 watts (0.7 - 6 GHz)	
Minus 73dBc typ.	
Spurious	
Primary Power (selected automatically)	
90 - 132, 180 - 264 VAC	
50/60 Hz, single phase	
210 watts max.	
Connectors	
RF input	Type N female on front panel
RF output	Type N female on front panel
Standard Remote Interfaces Included	
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	15.9 kg (35 lb)
Size (WxHxD)	
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in	

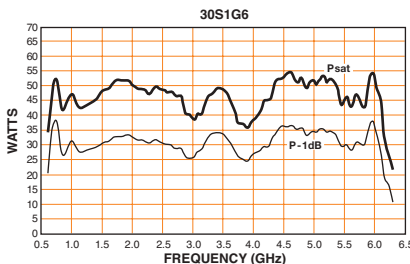


30S1G6 Solid State Amplifier



30 watts CW, 0.7-6.0 GHz

Rated Power Output	30 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 35 watts / min. 26 watts	
Power Output @ 1dB compression	
Nominal 30 watts / min. 22 watts	
Small Signal Gain Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	0.7 - 6 GHz instantaneously
Gain (at max. setting)	44dB min.
Gain Adjustment (continuous range)	10dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	50dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 30 watts
Spurious	Minus 73dBc typ.
Primary Power (selected automatically)	
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)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	18.2 kg (40 lb)
Size (WxHxD)	
50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in	
Export Classification:	EAR99

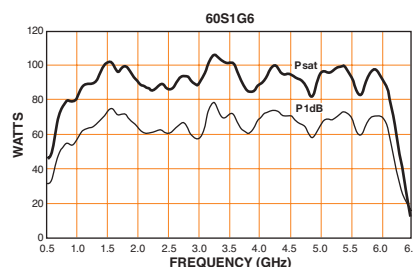


60S1G6 Solid State Amplifier



60 watts CW, 0.7-6.0 GHz

Rated Power Output	60 watts min. (0.7 - 6 GHz)
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 70 watts / min. 55 watts	
Power Output @ 1dB compression	
Nominal 60 watts / min. 50 watts	
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	0.7 - 6 GHz instantaneously
Gain (at max. setting)	48dB min.
Gain Adjustment (continuous range)	10dB 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. *See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	56dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 60 watts (0.7 - 6 GHz)
Spurious	Minus 73dBc typ.
Phase Linearity	±1 deg/100 MHz, typ.
Primary Power (selected automatically)	
90 - 132, 180 - 250 VAC	
50/60 Hz, single phase	
550 watts max.	
Connectors	
RF	Type N female on front panel
Remote Interfaces	
IEEE-488	24 pin
RS-232	9 pin Subminiature D
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	28.4 kg (62.5 lb)
Size (WxHxD)	
50.3 x 20.3 x 54.6 cm / 19.8 x 8.0 x 21.5 in	
Export Classification:	3A001

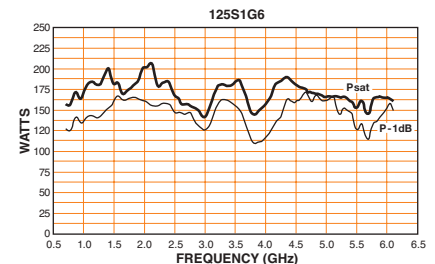


125S1G6 Solid State Amplifier



125 watts CW, 0.7-6.0 GHz

Rated Power Output	125 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 125 watts / min. 120 watts	
Power Output @ 1dB compression	
Nominal 120 watts / min. 100 watts	
Flatness	±1.5dB typ. / ±2.5dB max.
Frequency Response	0.7 - 6 GHz instantaneously
Gain (at max. setting)	52dB min.
Gain Adjustment (continuous range)	10dB 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. *See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	58dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 125 watts (0.7 - 6 GHz)
Spurious	Minus 73dBc typ.
Phase Linearity	±1 deg/100 MHz, typ.
Primary Power (selected automatically)	
90 - 132, 180 - 264 VAC	
50/60 Hz, single phase,	
1100 watts max.	
Connectors	
RF	Type N female on front panel
Remote Interfaces	
IEEE-488	24 pin
RS-232	9 pin Subminiature D
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	45 kg (100 lb)
Size (WxHxD)	
50.3 x 30 x 61 cm / 19.8 x 11.8 x 24 in	
Export Classification:	3A001



Microwave Solid State Amplifiers

0.7 to 6 GHz

250S1G6 Solid State Amplifier



250 watts CW, 0.7-6.0 GHz

Rated Power Output	250 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	Nominal 250 watts / min. 225 watts
Power Output @ 1dB compression	Nominal 220 watts / min. 200 watts
Flatness	±1.5dB typ. / ±2.5dB max.
Frequency Response	0.7 - 6 GHz instantaneously
Gain (at max. setting)	54dB min.
Gain Adjustment (continuous range)	10dB 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. *See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	60dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 250 watts (0.75 - 6.0 GHz); 18 dBc typ. (0.7 - 0.75 GHz)
Spurious	Minus 73dBc typ.
Phase Linearity	±1 deg/100 MHz, typ.
Primary Power (selected automatically)	200 - 250 VAC 50/60 Hz, single phase 2500 watts max.
Connectors	RF Type N female on front panel
Remote Interfaces	IEEE-488 24 pin RS-232 9 pin Subminiature RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	64 kg (140 lb)
Size (WxHxD)	50.3 x 47 x 61 cm / 19.8 x 18.5 x 24 in
Export Classification:	3A001

350S1G6A Solid State Amplifier



350 watts CW, 0.7-6.0 GHz

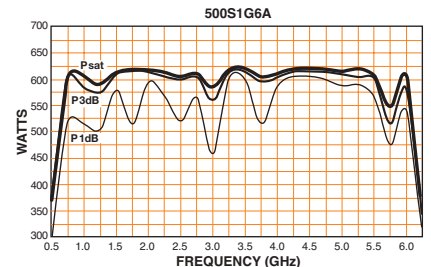
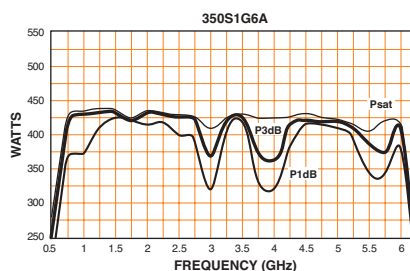
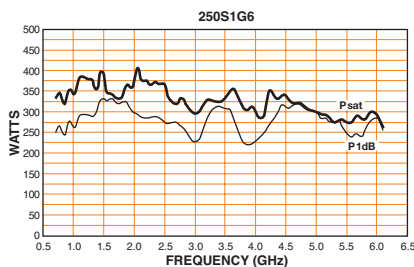
Rated Power Output	350 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	Nominal 370 watts / min. 315 watts
Power Output @ 1dB compression	Nominal 300 watts / min. 250 watts
Flatness	±1.5dB typ. / ±2.5dB max.
Frequency Response	0.7 - 6 GHz instantaneously
Gain (at max. setting)	56dB min.
Gain Adjustment (continuous range)	10dB 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 up to 6.0:1 mismatch above which may limit to 175 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. See Application Note #27.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
Third Order Intercept Point	58dBm typ.
Harmonic Distortion	Minus 20 dBc maximum at 300 watts (1.0-6.0 GHz); Minus 20 dBc typical at 300 watts (0.7-1.0 GHz).
Primary Power (selected automatically)	200 - 260 VAC 50/60 Hz, single phase 3600 watts max.
Connectors	RF input Type N female on front panel RF output Type 7-16 DIN female on front panel Safety intlk 15 pin female subminiature D, rear Remote computer interface IEEE-488 (GPIB) & RS-232 connector, rear
Remote Computer Interface (Fiber Optic)	ST Conn Tx, RS-232 Rx
USB 2.0	Type B
Ethernet	RJ-45
Cooling	Forced air (self contained fans)
Weight	136 kg (300 lbs)
Size (WxHxD)	50.3 x 127 x 61 cm / 19.8 x 50 x 24 in
Export Classification:	3A001

500S1G6A Solid State Amplifier



500 watts CW, 0.7-6.0 GHz

Rated Power Output	500 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	Nominal 525 watts / min. 475 watts
Power Output @ 1dB compression	Nominal 450 watts / min. 400 watts
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7 - 6 GHz instantaneously
Gain (at max. setting)	57 dB min.
Gain Adjustment (continuous range)	10 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. *See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	63 dBm typ.
Harmonic Distortion	Minus 20dBc max. at 400 watts (1 - 6 GHz); Minus 20 dBc typ. at 400 watts (0.7 - 1 GHz)
Primary Power (selected automatically)	200 - 260 VAC 50/60 Hz, single phase 3800 watts
Connectors	RF Input Type N female on rear panel RF Output Type 7-16 DIN female on rear panel
Remote Interfaces	IEEE-488 (GPIB) & RS-232 connector, rear ST Conn Tx, RS-232 Rx (fiber optic) USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D, rear
IEEE-488 (GPIB) Interface & RS-232	Allows control and monitoring of all front panel controls except keylock position control
Cooling	Forced air (self contained fans)
Weight	136 kg (300 lb)
Size (WxHxD)	50.3 x 127 x 61 cm / 19.8 x 50 x 24 in
Export Classification:	3A001



0.8 to 4.2 GHz

525S1G4A Solid State Amplifier



525 watts CW, 0.8-4.2 GHz

Rated Power Output	525 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 525 watts / min. 475 watts	
Power Output @ 1dB compression	
Nominal 450 watts / min. 400 watts	
Flatness	±2.0dB typ. / ±2.5dB max.
Frequency Response	0.8 - 4.2 GHz instantaneously
Gain (at max. setting)	57.2dB min.
Gain Adjustment	15dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
RF Power Display	Digital, forward and reflected
Third Order Intercept	66dBm typ.
Harmonic Distortion	Minus 20dBc max. at 500 watts
Primary Power	
200 - 260 VAC	
50/60 Hz, single phase	
3000 watts	
Connectors	
RF input	Type N female on rear panel
RF output	Type 7-8 EIA female on rear panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin female Subminiature D on rear panel
IEEE-488 (GPIB) Interface & RS-232	
Allows control and monitoring of all front panel controls except keylock position control.	
Cooling	Forced air (self contained fans)
Weight	136 kg (300 lb)
Size (WxHxD)	
50.3 x 127 x 61 cm / 19.8 x 50 x 24 in.	

700S1G4A Solid State Amplifier



700 watts CW, 0.8-4.2 GHz

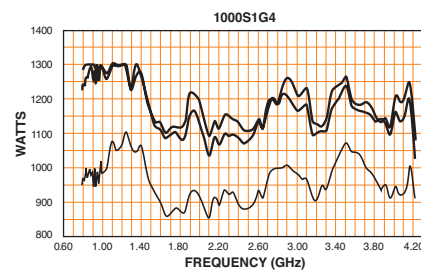
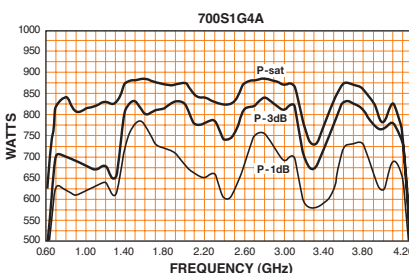
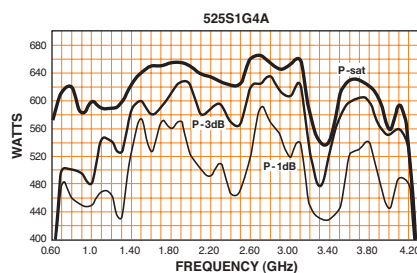
Rated Power Output	700 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 700 watts / min. 625 watts	
Power Output @ 1dB compression	
Nominal 600 watts / min. 525 watts	
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	0.8 - 4.2 GHz instantaneously
Gain (at max. setting)	59dB min.
Gain Adjustment	15dB 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.	
* See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
RF Power Display	Digital, forward and reflected
Third Order Intercept	67dBm typ.
Harmonic Distortion	Minus 20dBc max. at 700 watts
Primary Power	
200 - 260 VAC	
50/60 Hz, single phase	
3800 watts	
Connectors	
RF input	Type N female on rear panel
RF output	Type 7-8 EIA female on rear panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin female Subminiature D on rear panel
IEEE-488 (GPIB) Interface & RS-232	
Allows control and monitoring of all front panel controls except keylock position control.	
Cooling	Forced air (self contained fans)
Weight	124.8 kg (275 lb)
Size (WxHxD)	
50.3 x 127 x 61 cm / 19.8 x 50 x 24 in.	

1000S1G4 Solid State Amplifier



1,000 watts CW, 0.8-4.2 GHz

Rated Power Output	1000 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 1050 watts / min. 950 watts	
Power Output @ 1dB compression	
Nominal 850 watts / min. 800 watts	
Flatness	±2.0dB typ. / ±2.5dB max.
Frequency Response	0.8 - 4.2 GHz instantaneously
Gain (at max. setting)	60.5dB min.
Gain Adjustment	20dB 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. * See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
RF Power Display	Digital, forward and reflected
Third Order Intercept	68dBm typ.
Harmonic Distortion	Minus 20 dBc maximum at 800 watts, -30 dBc typical at 800 watts.
Primary Power	
200 - 240 VAC	
50/60 Hz, single phase	
5800 watts	
Connectors	
RF input	Type N female on rear panel
RF output	Type 7-8 EIA female on rear panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 pin female Subminiature D on rear panel
IEEE-488 (GPIB) Interface & RS-232	
Allows control and monitoring of all front panel controls except keylock position control.	
Cooling	Forced air (self contained fans)
Weight	244.8 kg (540 lbs)
Size (WxHxD)	
68.8 x 202.2 x 82.5 cm / 27.1 x 79.6 x 32.5 in.	



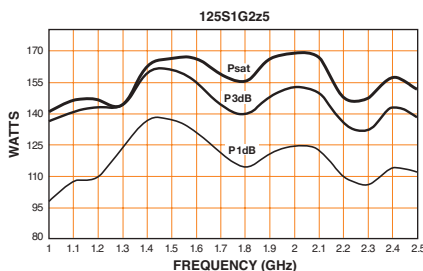
Microwave Solid State Amplifiers 1.0 to 2.5 GHz

125S1G2z5 Solid State Amplifier



125 watts CW, 1.0-2.5 GHz

Rated Power Output	140 watts typ., 125 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Typ. 120 watts, min. 115 watts
Power Output @ 1dB compression	Typ. 110 watts, min. 90 watts
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	1.0 - 2.5 GHz instantaneously
Gain (at max. setting)	54dB min.
Gain Adjustment (continuous range)	20dB 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.
	* See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	60dBm typ.
Noise Figure	12dB max.; 10dB typ.
Harmonic Distortion	Minus 20dBc max. at 100 watts Minus 30dBc typ. at 100 watts
Spurious	Minus 73dBc typ.
Primary Power (selected automatically)	100 - 240 VAC 50/60 Hz, single phase 650 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 USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	With Cabinet 36.7 kg (81 lb) Without Cabinet 25.4 kg (56 lb)
Size (WxHxD)	With cabinet 50.3 x 20.5 x 74.9 cm (19.8 x 8.1 x 29.5 in) Without Cabinet 48.3 x 17.7 x 74.9 cm (19 x 7.0 x 29.5 in)
Export Classification:	EAR99

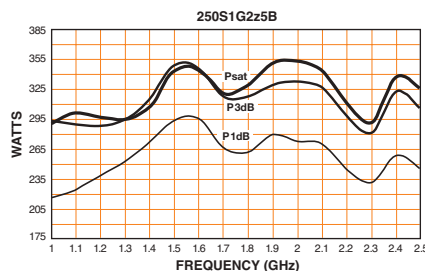


250S1G2z5B Solid State Amplifier



250 watts CW, 1.0-2.5 GHz

Rated Power Output	300 watts typ., 250 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Typ. 275 watts, min. 250 watts
Power Output @ 1dB compression	Typ. 225 watts, min. 200 watts
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	1.0 - 2.5 GHz instantaneously
Gain (at max. setting)	58dB min.
Gain Adjustment (continuous range)	20dB 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.
	* See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	62dBm typ.
Noise Figure	12dB max.; 10dB typ.
Harmonic Distortion	Minus 20dBc max. at 200 watts Minus 30dBc typ. at 200 watts
Spurious	Minus 73dBc typ.
Primary Power (selected automatically)	100 - 240 VAC 50/60 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) Fiber optic: ST Conn Tx and Rx RS-232 USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	With Cabinet 42.6 kg (94 lb) Without Cabinet 31.3 kg (69 lb)
Size (WxHxD)	With cabinet 50.3 x 20.5 x 74.9 cm (19.8 x 8.1 x 29.5 in) Without Cabinet 48.3 x 17.7 x 74.9 cm (19 x 7.0 x 29.5 in)
Export Classification:	EAR99

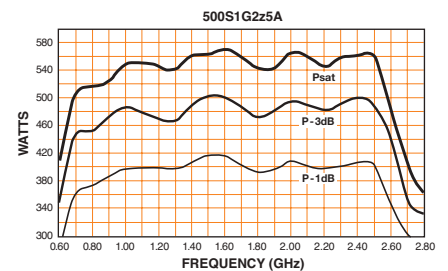


500S1G2z5A Solid State Amplifier



500 watts CW, 1.0-2.5 GHz

Rated Power Output	500 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	Nominal 550 watts / min. 450 watts
Power Output @ 1dB compression	Nominal 400 watts / min. 350 watts
Flatness	±1.5dB typ. / ±2.0dB max.
Frequency Response	1.0 - 2.5 GHz instantaneously
Gain (at max. setting)	57dB min.
Gain Adjustment (continuous range)	20dB 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. * See Application Note #27A.
Modulation Capability	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point	66dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 350 watts Minus 20dBc typ. at 500 watts
Spurious	Minus 73dBc typ.
Phase Linearity	±1.0 deg/100 MHz, typ.
Primary Power (selected automatically)	200 - 240 VAC 50/60 Hz, single phase 2200 watts max.
Connectors	RF input Type N female RF output Type 7/16 female
Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D (female) RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	With Cabinet 77.1 kg (170 lb) Without Cabinet 58.5 kg (129 lb)
Size (WxHxD)	With cabinet 50.3 x 38.1 x 74.9 cm (19.8 x 15 x 29.5 in) Without Cabinet 48.3 x 35.6 x 74.9 cm (19 x 14.0 x 29.5 in)
Export Classification:	EAR99



750S1G2z5 Solid State Amplifier



750 watts CW, 1.0-2.5 GHz

Rated Power Output	750 watts min.
Input For Rated Output	1.0 milliwatt max.
Power Output @ 3dB compression	
Typ. 750 watts / min. 675 watts	
Power Output @ 1dB compression	
Typ. 650 watts / min. 550 watts	
Flatness	± 1.5dB typ. / ± 2.0dB max.
Frequency Response	1.0 - 2.5 GHz instantaneously
Gain (at max. setting)	58.8dB min.
Gain Adjustment (continuous range)	20dB 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. * See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	69dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 600 watts Minus 20dBc typ. at 750 watts
Spurious	Minus 73dBc typ.
Primary Power (selected automatically)	
200 - 240 VAC 50/60 Hz, single phase 3400 watts max.	
Connectors	
RF input	Type N female
RF output	Type 7/16 female on rear panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	124.7 kg (275 lb)
Size (WxHxD)	56.1 x 97.8 x 82.5 cm (22.1 x 38.5 x 32.5 in)
Export Classification:	EAR99

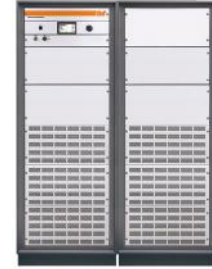
1000S1G2z5B Solid State Amplifier



1,000 watts CW, 1.0-2.5 GHz

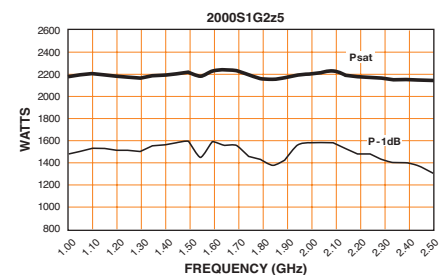
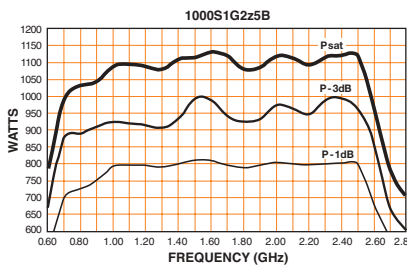
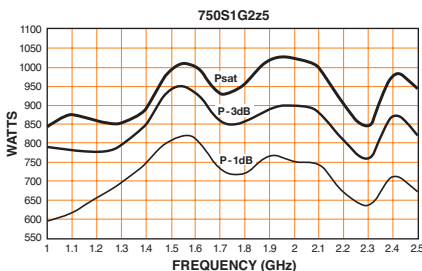
Rated Power Output	1000 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 1000 watts / min. 925 watts	
Power Output @ 1dB compression	
Nominal 850 watts / min. 725 watts	
Flatness	± 1.5dB typ. / ± 2.0dB max.
Frequency Response	1 - 2.5 GHz instantaneously
Gain (at max. setting)	60dB min.
Gain Adjustment (continuous range)	20dB 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. * See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	69dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 800 watts Minus 20dBc typ. at 1000 watts
Spurious	Minus 73dBc typ.
Primary Power (selected automatically)	
200 - 240 VAC 50/60 Hz, single phase 4200 watts max.	
Connectors	
RF input	Type N female
RF output	Type 7-16 DIN female on rear panel
Remote Interfaces	
IEEE-488	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	131.5 kg (290 lb)
Size (WxHxD)	56.1 x 97.8 x 82.5 cm (22.1 x 38.5 x 32.5 in)
Export Classification:	EAR99

2000S1G2z5 Solid State Amplifier

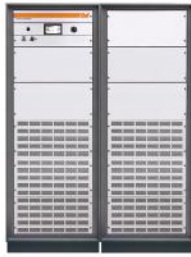


2,000 watts CW, 1.0-2.5 GHz

Rated Power Output	2100 watts min.
Input For Rated Output	1 milliwatt max.
Power Output @ 3dB compression	
Nominal 1850 watts / min. 1750 watts	
Power Output @ 1dB compression	
Nominal 1500 watts / min. 1300 watts	
Average Output Power @ 3.2 GHz And Above:	
	Less than 60 watts
Flatness	± 1.5dB typ. / ± 2.0dB max.
Frequency Response	1 - 2.5 GHz instantaneously
Gain (at max. setting)	63dB min.
Gain Adjustment (continuous range)	20dB 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 up to 6.0:1 mismatch above which may limit to 1000 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. *See Application Note #27A.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	70dBm typ.
Noise Figure	10dB typ.
Harmonic Distortion	Minus 20dBc max. at 1400 watts
Spurious	Minus 73dBc typ.
Primary Power (selected automatically)	
208 VAC, WYE (5-wire) 50/60 Hz, 3-phase, 12kVA	
Connectors	
RF input	Type N female on rear panel
RF output	Type 1-5/8 EIA female on rear panel
Remote computer interfaces	
IEEE-488	24 pin
RS-232	9 pin subminiature D
RS-232 Fiber Optic	Type ST
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	296 kg (650 lb)
Size (WxHxD) 2 joined cabinets:	
111.8 x 123.7 x 83 cm / 44.0 x 48.7 x 32.4 in	
Base Requirements: 3" diameter/2" wide casters, height adjustable over 1". Must accommodate forklift.	
Export Classification:	EAR99



3000S1G2z5 Solid State Amplifier



3,000 watts CW, 1.0-2.5 GHz

Rated Power Output 3000 watts min.
Input For Rated Output 1 milliwatt max.
Power Output @ 3dB compression
 Nominal 2750 watts / min. 2600 watts
Power Output @ 1dB compression
 Nominal 2300 watts / min. 2000 watts
Average Output Power @ 3.2 GHz And Above: Less than 60 watts

Flatness ±1.5dB typ. / ±2.0dB max.
Frequency Response 1 - 2.5 GHz instantaneously
Gain (at max. setting) 64dB min.
Gain Adjustment (continuous range) 20dB 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 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.
 *See Application Note #27A.

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

Third Order Intercept Point 72dBm typ.
Noise Figure 10dB typ.
Harmonic Distortion Minus 20dBc max. at 2200 watts
Spurious Minus 73dBc typ.
Primary Power (selected automatically)
 208 VAC, WYE (5-wire)
 50/60 Hz, 3-phase, 17.5kVA

Connectors
 RF input Type N female on rear panel
 RF output Type 1-5/8 EIA female on rear panel

Remote computer interfaces
 IEEE-488 24 pin
 RS-232 9 pin subminiature D
 RS-232 Fiber Optic Type ST
 USB 2.0 Type B
 Ethernet RJ-45

Safety Interlock 15 Pin Subminiature D
Cooling Forced air (self contained fans)
Weight 432 kg (950 lb)

Size (WxHxD)
 111.8 x 149.9 x 83 cm / 44.0 x 59 x 32.4 in
Base Requirements: 3" diameter/2" wide casters, height adjustable over 1". Must accommodate forklift.
Export Classification: EAR99

20SG618-L Solid State Amplifier



20 watts CW, 6.0-18 GHz

Rated Power Output 20 watts min.
Input For Rated Output 1 milliwatt max., 0dBm
Power Output @ 3dB compression
 Nominal 25 watts / min. 18 watts
Power Output @ 1dB compression
 Nominal 22 watts / min. 15 watts
Power Gain Flatness (0 dBm IN) ±2dB typ. / ±3dB max.
Frequency Response 6.0 - 18 GHz instantaneously
Gain (at max. setting) 43dB min.
Gain Adjustment (continuous range) 10dB min.
Input Impedance 50 ohms, VSWR 2.5:1 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.

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

Third Order Intercept Point 49dBm typ.
Harmonic Distortion Minus 20dBc max. at 20 watts
Primary Power (selected automatically)
 90 - 132, 180 - 264 VAC
 50/60 Hz, single phase
 <700 watts max.

Connectors
 RF input Precision N female on rear panel
 RF output Precision N female on rear panel

Remote Interfaces
 IEEE-488 24 pin female
 RS-232 9 pin Subminiature D (female)
 RS-232 (fiber optic) Type ST
 USB 2.0 Type B
 Ethernet RJ-45

Safety Interlock 15 pin Subminiature D
Cooling Forced air (internal self-contained liquid)
Weight w/cabinet: 31.75 kg (70 lb)
 w/o cabinet: 20.4 kg (45 lb)

Size (WxHxD)
 w/cabinet: 50.3 x 20.6 x 62.2 cm / 19.8 x 8.1 x 24.5 in
 w/o cabinet: 48.3 x 17.8 x 62.2 cm / 19.0 x 7.0 x 24.5 in
Export Classification: 3A001

40SG618-L Solid State Amplifier



40 watts CW, 6.0-18 GHz

Rated Power Output 40 watts min.
Input For Rated Output 1 milliwatt max., 0dBm
Power Output @ 3dB compression
 Nominal 45 watts / min. 35 watts
Power Output @ 1dB compression
 Nominal 30 watts / min. 22 watts
Power Gain Flatness (0 dBm IN) ±2dB typ. / ±3dB max.
Frequency Response 6.0 - 18 GHz instantaneously
Gain (at max. setting) 46dB min.
Gain Adjustment (continuous range) 10dB min.
Input Impedance 50 ohms, VSWR 2.5:1 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.

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

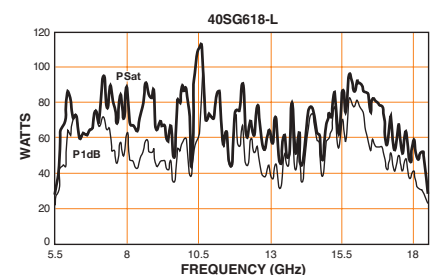
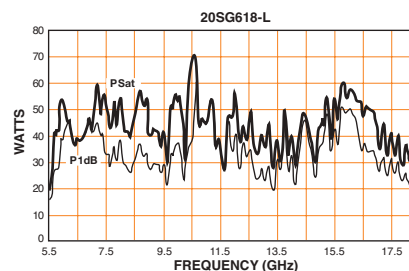
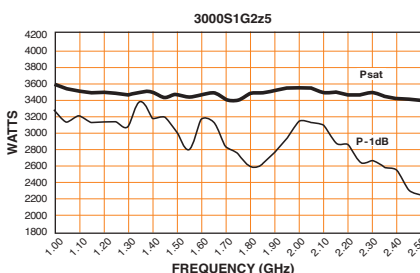
Third Order Intercept Point 52dBm typ.
Harmonic Distortion Minus 20dBc max. at 40 watts
Primary Power (selected automatically)
 90 - 132, 180 - 264 VAC
 50/60 Hz, single phase
 <1000 watts max.

Connectors
 RF input Precision N female on rear panel
 RF output Precision N female on rear panel

Remote Interfaces
 IEEE-488 24 pin female
 RS-232 9 pin Subminiature D (female)
 RS-232 (fiber optic) Type ST
 USB 2.0 Type B
 Ethernet RJ-45

Safety Interlock 15 pin Subminiature D
Cooling Forced air (internal self-contained liquid)
Weight w/cabinet: 34 kg (75 lb)
 w/o cabinet: 22.7 kg (50 lb)

Size (WxHxD)
 w/cabinet: 50.3 x 20.6 x 62.2 cm / 19.8 x 8.1 x 24.5 in
 w/o cabinet: 48.3 x 17.8 x 62.2 cm / 19.0 x 7.0 x 24.5 in
Export Classification: 3A001

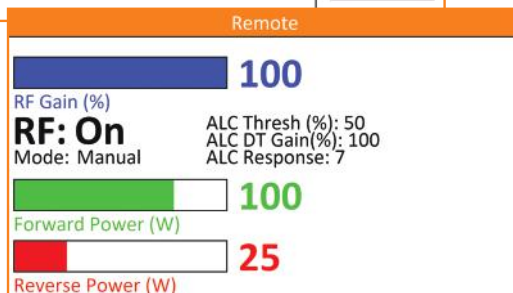
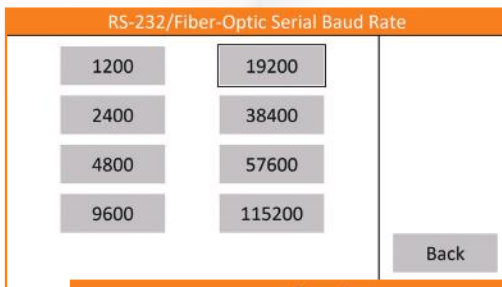


AR's Amplifier Control System



AR's latest Touch Panel amplifier control system represents a number of significant advancements. We've expanded its abilities, and made it easier to control and monitor important functions. Following are some of the features:

- Fiber-optic link between control system modules
- The control system modules self-address
- Each control system module has 32 General Purpose I/O, 2 analog outputs, and 4 analog inputs
- The system is expandable up to 4096 modules
- Color-resistive touch screen display
- Standard remote ports: GPIB, RS-232, USB, F/O Serial, & Ethernet
- Remote port settings controlled through touch screen menus
- Special system module for monitoring sub-system forward and reverse power levels to determine if they are balanced
- ALC for output leveling
- Ability to monitor full system and sub-system power levels
- Easy integration with systems using an external chiller
- Module firmware upgradeable through USB port using a PC
- VSWR indication on A-Series amplifiers
- Safety "keep alive" system for remote communication on high powered amplifiers



These screen shots and the explanations of the screens' functions provide a look at just how intuitive and powerful the AR Touch Panel control system is.

Dual-Band, Class A Solid State Amplifiers

We put two of our state of the art Class A CW amplifiers in a single chassis to address your needs and provide an easy to use amplifier system. With AR's Dual Band Amplifiers, you have freedom like never before.

The Dual-Band Amplifiers combine two amplifiers in one package, enabling you to cover a wider frequency with one dual-band amp that costs less, weighs less and requires less space than two solid state individual amplifiers.

Our Dual-Band amplifiers are Mismatch Tolerant, providing 100% of rated power without foldback. These amplifiers can be used for EMC, EW and other applications because they are linear and extremely load tolerant. They will operate without damage or oscillation with any magnitude and phase of source and load impedance.

All our 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.

Some Benefits To Our Customers Are:

- Single unit eliminates need for external switches, resulting in less complexity & lower unit cost
- Simplify setup and improve throughput by not having to change antenna, coupler, or control interface
- Single unit more compact when space is an issue
- Less bulk and weight results in easier handling
- No foldback provides the maximum power to the load – you get the power you paid for
- Future upgradability results in lower upgrade costs on select models

From 700 MHz To 18 GHz "S" Series Solid State Dual-Band Amplifiers

These dual band units supply you with up to 60 watts in the first 0.7-6 GHz band split and up to 40 watts output power in the 6-18 GHz split. A few of the applications benefiting from these models include immunity testing, EW, calibration, R&D, and material testing.

These versatile dual-band amplifiers also have the flexibility to be upgraded to higher power levels for each specific frequency range.

From 10 kHz To 1000 MHz Solid State Dual-Band Amplifiers

Applications specific dual band amplifiers that are ready for the job! With AR's state-of-the-art design capabilities, these dual band amplifiers will help the user be more productive while watching the bottom line. Capabilities allow us to combine the best of our single band amplifiers to exceed requirements of standards such as near-field immunity, IEC EN61000, and Mil-Std 461 CS114 Navy.



10 kHz to 1000 MHz 0.7 to 18 GHz

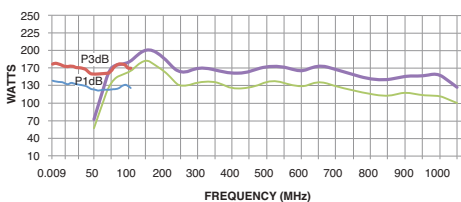
150/150AW1000 Dual-Band Solid State Amplifier



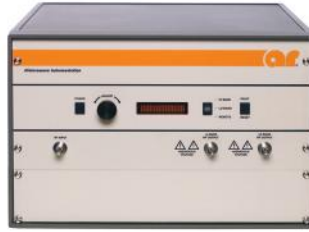
150/130 watts, 10 kHz-1000 MHz

Rated Power Output	150 watts min (10 kHz – 100 MHz) 130 watts min (80 – 1000 MHz)
Input For Rated Output	1.0 milliwatt max., 0dBm
Power Output @ 3dB compression	
Nominal	165 watts (10 kHz – 100 MHz) 150 watts (80 – 1000 MHz)
Minimum	140 watts (10 kHz – 100 MHz) 125 watts (80 – 1000 MHz)
Power Output @ 1dB compression	
Nominal	135 watts (10 kHz – 100 MHz) 125 watts (80 – 1000 MHz)
Minimum	110 watts (10 kHz – 100 MHz) 100 watts (80 – 1000 MHz)
Power Gain Flatness (0 dBm IN)	± 1.0 dB typ., ± 1.5 dB max. (10 kHz – 100 MHz) ± 1.5 dB typ., ± 2.0 dB max. (80 – 1000 MHz)
Frequency Response	10 kHz – 100 MHz instantaneously 80 – 1000 MHz instantaneously
Power Gain (at max. setting)	51.8 dB min. (10 kHz – 100 MHz) 52 dB min. (80 – 1000 MHz)
Gain Adjustment (continuous range)	20 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. See Application Note 27A.
Spurious	Minus 73 dBc typ.
Harmonic Distortion	Minus 20 dBc max. at 100 watts, -30 dBc typ. at 70 watts (10 kHz – 100 MHz) -30 dBc typ. at 100 watts (80 – 1000 MHz)
Third Order Intercept Point	55 dBm typ. (10 kHz – 100 MHz) 58 dBm typ. (80 – 1000 MHz)
Noise Figure	8 dB typ. (10 kHz – 100 MHz) 8 dB max., 6 dB typ. (80 – 1000 MHz)
Primary Power (Universal; selected automatically)	100-240 VAC, 50/60 Hz 500 watts (10 kHz – 100 MHz) 650 watts max. (80 – 1000 MHz)
Connectors	RF input Type N female RF output Type N female
Standard Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D Female RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (internal self-contained liquid)
Weight	42.6 kg (94 lb)
Size (WxHxD)	50.3 x 20.5 x 74.9 cm (19.8 x 8.1 x 29.5 in)
Export Classification:	EAR99

Model 150/150AW1000 Typical Power Output



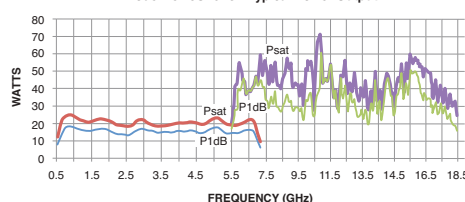
15/20S1G18B Dual-Band Solid State Amplifier



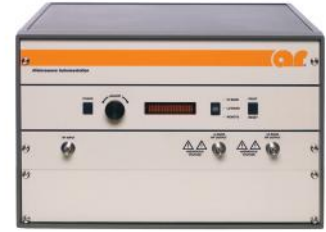
15/20 watts, 0.7 GHz-18 GHz

Rated Power Output	15 watts min (0.7 – 6 GHz), 20 watts min (6 – 18 GHz)
Input For Rated Output	1.0 milliwatt max., 0dBm
Power Output @ 3dB compression	
Nominal	20 watts (0.7 – 6 GHz), 25 watts (6 – 18 GHz)
Minimum	14 watts (0.7 – 6 GHz), 18 watts (6 – 18 GHz)
Power Output @ 1dB compression	
Nominal	15 watts (0.7 – 6 GHz), 22 watts (6 – 18 GHz)
Minimum	12 watts (0.7 – 6 GHz), 15 watts (6 – 18 GHz)
Power Gain Flatness (0 dBm IN)	± 1.5 dB typ., ± 2.0 dB max. (0.7 – 6 GHz) ± 2.0 dB typ., ± 3.0 dB max. (6 – 18 GHz)
Frequency Response	0.7 – 6 GHz instantaneously 6 – 18 GHz instantaneously
Power Gain (at max. setting)	43 dB min. (0.7 – 6 GHz), 44 dB min. (6 – 18 GHz)
Input Impedance	50 ohms, VSWR 2.5:1 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. See Application Note 27A.
Spurious	Minus 73 dBc typ.
Harmonic Distortion	Minus 20 dBc max. at 15 watts (0.7 – 6 GHz) Minus 20 dBc max. at 20 watts (6 – 18 GHz)
Third Order Intercept Point	48 dBm typ. (0.7 – 6 GHz), 49 dBm typ. (6 – 18 GHz)
Noise Figure	10 dB typ.
Primary Power	90-264 VAC 50/60 Hz, single phase 210 watts max. (0.7 – 6 GHz) 600 watts max. (6 – 18 GHz)
Connectors	RF input Type N female front panel RF output Type N female front panel
Standard Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D Female RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (internal self-contained liquid)
Weight	40.5 kg (89 lb)
Size (WxHxD)	50.3 x 34 x 62.2 cm (19.8 x 13.4 x 24.5 in)
Export Classification:	3A001

Model 15/20S1G18B Typical Power Output



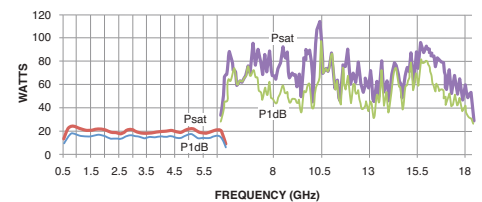
15/40S1G18A Dual-Band Solid State Amplifier



15/40 watts, 0.7 GHz-18 GHz

Rated Power Output	15 watts min (0.7 – 6 GHz), 40 watts min (6 – 18 GHz)
Input For Rated Output	1.0 milliwatt max., 0dBm
Power Output @ 3dB compression	
Nominal	20 watts (0.7 – 6 GHz), 46 watts (6 – 18 GHz)
Minimum	15 watts (0.7 – 6 GHz), 35 watts (6 – 18 GHz)
Power Output @ 1dB compression	
Nominal	15 watts (0.7 – 6 GHz), 30 watts (6 – 18 GHz)
Minimum	12 watts (0.7 – 6 GHz), 22 watts (6 – 18 GHz)
Power Gain Flatness (0 dBm IN)	± 1.5 dB typ., ± 2.0 dB max. (0.7 – 6 GHz) ± 2.0 dB typ., ± 3.0 dB max. (6 – 18 GHz)
Frequency Response	0.7 – 6 GHz instantaneously 6 – 18 GHz instantaneously
Power Gain (at max. setting)	43 dB min. (0.7 – 6 GHz), 46 dB min. (6 – 18 GHz)
Input Impedance	50 ohms, VSWR 2.5:1 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. See Application Note 27A.
Spurious	Minus 73 dBc typ.
Harmonic Distortion	Minus 20 dBc max. at 15 watts (0.7 – 6 GHz) Minus 20 dBc max. at 40 watts (6 – 18 GHz)
Third Order Intercept Point	48 dBm typ. (0.7 – 6 GHz), 52 dBm typ. (6 – 18 GHz)
Noise Figure	10 dB typ.
Primary Power	90-264 VAC 50/60 Hz, single phase 210 watts max. (0.7 – 6 GHz) <1000 watts max. (6 – 18 GHz)
Connectors	RF input Type N female front panel RF output Type N female front panel
Standard Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D Female RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (internal self-contained liquid)
Weight	44 kg (97 lb)
Size (WxHxD)	50.3 x 34 x 62.2 cm (19.8 x 13.4 x 24.5 in)
Export Classification:	3A001

Model 15/40S1G18A Typical Power Output



Dual Band, Solid State Amplifiers

0.7 to 18 GHz

30/20S1G18B Dual-Band Solid State Amplifier



30/20 watts, 0.7 GHz-18 GHz

Rated Power Output	30 watts min (0.7 – 6 GHz), 20 watts min (6 – 18 GHz)
Input For Rated Output	1.0 milliwatt max., 0dBm
Power Output @ 3dB compression	
Nominal	35 watts (0.7 – 6 GHz), 25 watts (6 – 18 GHz)
Minimum	26 watts (0.7 – 6 GHz), 18 watts (6 – 18 GHz)
Power Output @ 1dB compression	
Nominal	30 watts (0.7 – 6 GHz), 22 watts (6 – 18 GHz)
Minimum	22 watts (0.7 – 6 GHz), 15 watts (6 – 18 GHz)
Power Gain Flatness (0 dBm IN)	±1.5 dB typ., ±2.0 dB max. (0.7 – 6 GHz) ±2.0 dB typ., ±3.0 dB max. (6 – 18 GHz)
Frequency Response	0.7 – 6 GHz instantaneously 6 – 18 GHz instantaneously
Power Gain (at max. setting)	44 dB min. (0.7 – 6 GHz), 43 dB min. (6 – 18 GHz)
Input Impedance	50 ohms, VSWR 2.5:1 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. See Application Note 27A.
Spurious	Minus 73 dBc typ.
Harmonic Distortion	Minus 20 dBc max. at 30 watts (0.7 – 6 GHz) Minus 20 dBc max. at 20 watts (6 – 18 GHz)
Third Order Intercept Point	50 dBm typ. (0.7 – 6 GHz), 49 dBm typ. (6 – 18 GHz)
Noise Figure	10 dB typ.
Primary Power	90-264 VAC 50/60 Hz, single phase 300 watts max. (0.7 – 6 GHz) 600 watts max. (6 – 18 GHz)
Connectors	RF input Type N female front panel RF output Type N female front panel
Standard Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D Female RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	42 kg (93 lb)
Size (WxHxD)	50.3 x 34 x 62.2 cm (19.8 x 13.4 x 24.5 in)
Export Classification:	3A001

30/40S1G18B Dual-Band Solid State Amplifier



30/40 watts, 0.7 GHz-18 GHz

Rated Power Output	30 watts min (0.7 – 6 GHz), 40 watts min (6 – 18 GHz)
Input For Rated Output	1.0 milliwatt max., 0dBm
Power Output @ 3dB compression	
Nominal	35 watts (0.7 – 6 GHz), 46 watts (6 – 18 GHz)
Minimum	26 watts (0.7 – 6 GHz), 35 watts (6 – 18 GHz)
Power Output @ 1dB compression	
Nominal	30 watts (0.7 – 6 GHz), 30 watts (6 – 18 GHz)
Minimum	22 watts (0.7 – 6 GHz), 22 watts (6 – 18 GHz)
Power Gain Flatness (0 dBm IN)	±1.5 dB typ., ±2.0 dB max. (0.7 – 6 GHz) ±2.0 dB typ., ±3.0 dB max. (6 – 18 GHz)
Frequency Response	0.7 – 6 GHz instantaneously 6 – 18 GHz instantaneously
Power Gain (at max. setting)	44 dB min. (0.7 – 6 GHz), 46 dB min. (6 – 18 GHz)
Input Impedance	50 ohms, VSWR 2.5:1 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. See Application Note 27A.
Spurious	Minus 73 dBc typ.
Harmonic Distortion	Minus 20 dBc max. at 30 watts (0.7 – 6 GHz) Minus 20 dBc max. at 40 watts (6 – 18 GHz)
Third Order Intercept Point	50 dBm typ. (0.7 – 6 GHz), 52 dBm typ. (6 – 18 GHz)
Noise Figure	10 dB typ.
Primary Power	90-264 VAC 50/60 Hz, single phase 300 watts max. (0.7 – 6 GHz) <1000 watts max. (6 – 18 GHz)
Connectors	RF input Type N female front panel RF output Type N female front panel
Standard Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D Female RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (internal self-contained liquid)
Weight	46.3 kg (102 lb)
Size (WxHxD)	50.3 x 34 x 62.2 cm (19.8 x 13.4 x 24.5 in)
Export Classification:	3A001

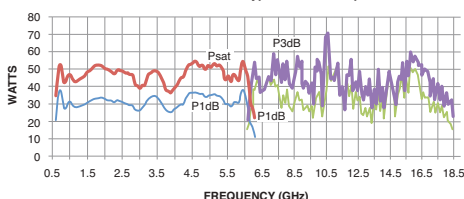
60/20S1G18B Dual-Band Solid State Amplifier



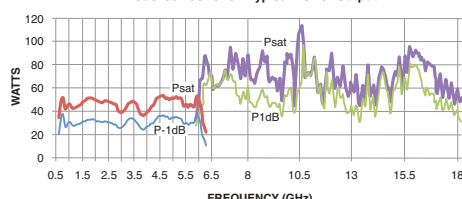
60/20 watts, 0.7 GHz-18 GHz

Rated Power Output	60 watts min (0.7 – 6 GHz), 20 watts min (6 – 18 GHz)
Input For Rated Output	1.0 milliwatt max., 0dBm
Power Output @ 3dB compression	
Nominal	60 watts (0.7 – 6 GHz), 25 watts (6 – 18 GHz)
Minimum	55 watts (0.7 – 6 GHz), 18 watts (6 – 18 GHz)
Power Output @ 1dB compression	
Nominal	57 watts (0.7 – 6 GHz), 22 watts (6 – 18 GHz)
Minimum	50 watts (0.7 – 6 GHz), 15 watts (6 – 18 GHz)
Power Gain Flatness (0 dBm IN)	±1.5 dB typ., ±2.0 dB max. (0.7 – 6 GHz) ±2.0 dB typ., ±3.0 dB max. (6 – 18 GHz)
Frequency Response	0.7 – 6 GHz instantaneously 6 – 18 GHz instantaneously
Power Gain (at max. setting)	48 dB min (0.7 – 6 GHz), 43 dB min (6 – 18 GHz)
Input Impedance	50 ohms, VSWR 2.5:1 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. See Application Note 27A.
Spurious	Minus 73 dBc typ.
Harmonic Distortion	Minus 20 dBc max. at 60 watts (0.7 – 6 GHz) Minus 20 dBc max. at 20 watts (6 – 18 GHz)
Third Order Intercept Point	54 dBm typ. (0.7 – 6 GHz), 49 dBm typ. (6 – 18 GHz)
Noise Figure	10 dB typ.
Primary Power	90-264 VAC 50/60 Hz, single phase 550 watts max. (0.7 – 6 GHz) 600 watts max. (6 – 18 GHz)
Connectors	RF input Type N female front panel RF output Type N female front panel
Standard Remote Interfaces	IEEE-488 24 pin female RS-232 9 pin Subminiature D Female RS-232 (fiber optic) Type ST USB 2.0 Type B Ethernet RJ-45
Safety Interlock	15 Pin Subminiature D
Cooling	Forced air (self contained fans)
Weight	50 kg (110 lb)
Size (WxHxD)	50.3 x 34 x 62.2 cm (19.8 x 13.4 x 24.5 in)
Export Classification:	3A001

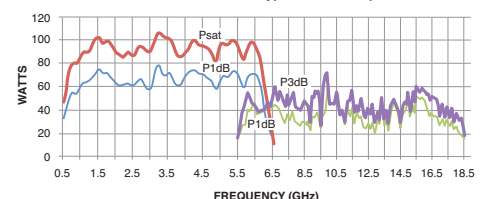
Model 30/20S1G18B Typical Power Output



Model 30/40S1G18B Typical Power Output



Model 60/20S1G18B Typical Power Output



60/40S1G18B Dual-Band Solid State Amplifier



60/40 watts, 0.7 GHz-18 GHz

Rated Power Output

60 watts min (0.7 – 6 GHz), 40 watts min (6 – 18 GHz)

Input For Rated Output

1.0 milliwatt max., 0dBm

Power Output @ 3dB compression

Nominal 60 watts (0.7 – 6 GHz), 46 watts (6 – 18 GHz)
 Minimum 55 watts (0.7 – 6 GHz), 35 watts (6 – 18 GHz)

Power Output @ 1dB compression

Nominal 57 watts (0.7 – 6 GHz), 30 watts (6 – 18 GHz)
 Minimum 50 watts (0.7 – 6 GHz), 22 watts (6 – 18 GHz)

Power Gain Flatness (0 dBm IN)

± 1.5 dB typ., ± 2.0 dB max. (0.7 – 6 GHz)
 ± 2.0 dB typ., ± 3.0 dB max. (6 – 18 GHz)

Frequency Response

0.7 – 6 GHz instantaneously
 6 – 18 GHz instantaneously

Power Gain (at max. setting)

48 dB min (0.7 – 6 GHz), 46 dB min (6 – 18 GHz)

Input Impedance

50 ohms, VSWR 2.5:1 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. See Application Note 27A.

Spurious

Minus 73 dBc typ.

Harmonic Distortion

Minus 20 dBc max. at 60 watts (0.7 – 6 GHz)
 Minus 20 dBc max. at 40 watts (6 – 18 GHz)

Third Order Intercept Point

54 dBm typ. (0.7 – 6 GHz),
 52 dBm typ. (6 – 18 GHz)

Noise Figure

10 dB typ.

Primary Power

90-264 VAC
 50/60 Hz, single phase
 550 watts max. (0.7 – 6 GHz)
 <1000 watts max. (6 – 18 GHz)

Connectors

RF input Type N female front panel
 RF output Type N female front panel

Standard Remote Interfaces

IEEE-488 24 pin female
 RS-232 9 pin Subminiature D Female
 RS-232 (fiber optic) Type ST
 USB 2.0 Type B
 Ethernet RJ-45

Safety Interlock

15 Pin Subminiature D

Cooling

Forced air (self contained fans)

Weight

52.2 kg (115 lb)

Size (WxHxD)

50.3 x 34 x 62.2 cm (19.8 x 13.4 x 24.5 in)

Export Classification:

3A001

Model 60/40S1G18B Typical Power Output

