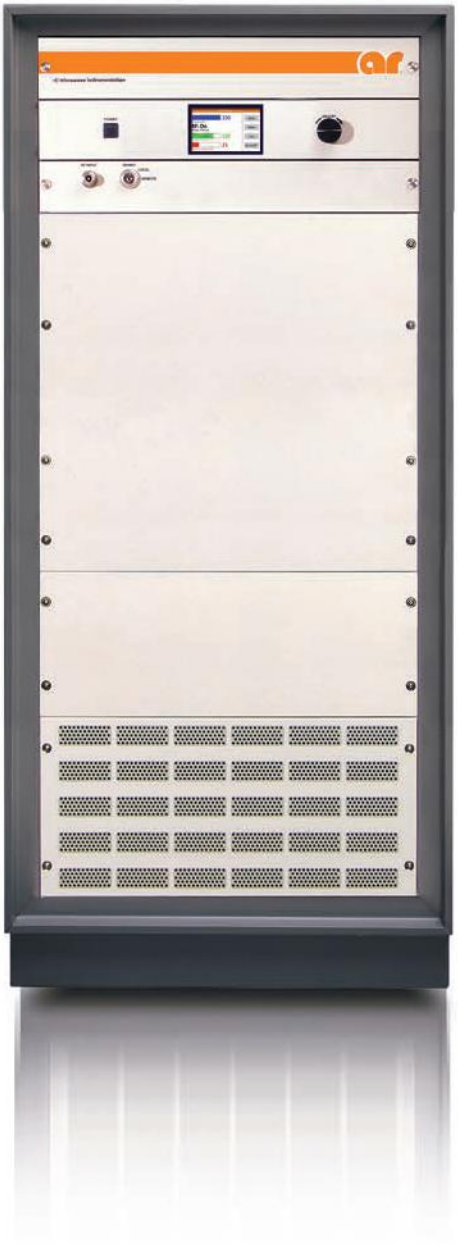
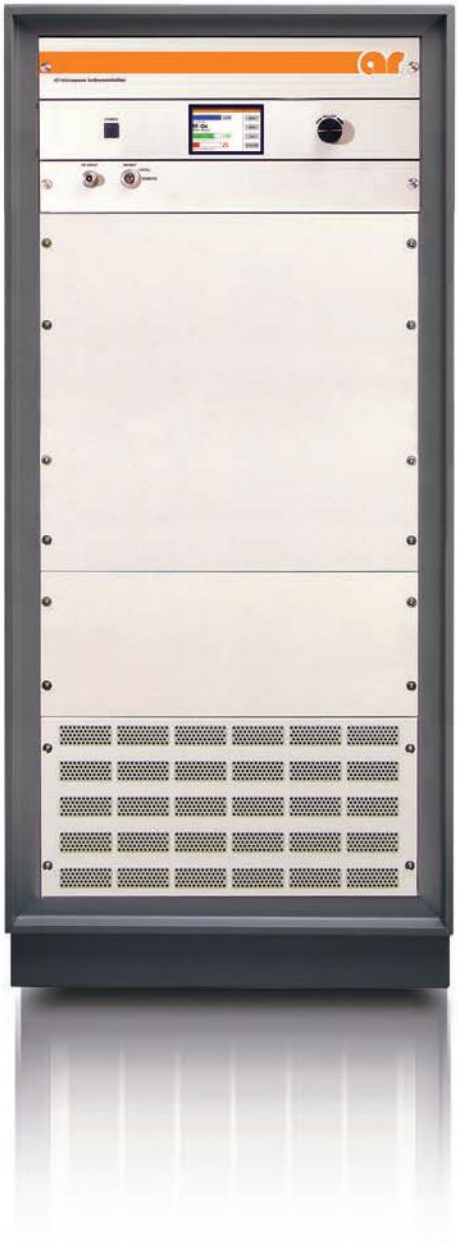
Performance and Reliability That Exceed Your Highest Expectations

Our “S” Series Solid State Amplifiers Span Numerous Industrial and Technology Applications

500S1G6A
500 Watts Class A CW
0.7–6.0 GHz



350S1G6A
350 Watts Class A CW
0.7–6.0 GHz



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

- Produce 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 with savings on input power and 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 providing the user with a lower overall cost when compared to two 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

3000S1G2z5
3,000 Watts CW
1.0–2.5 GHz

0.7 to 6 GHz

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 @ 3 dB compression	
Nominal 20 watts / min. 15 watts	
Power Output @ 1 dB compression	
Nominal 15 watts / min. 12 watts	
Flatness	±1.5 dB typ. / ±2.0 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	43 dB min.
Gain Adjustment (continuous range) (4096 steps remote)	10 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance*	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	48 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 15 watts (1–6 GHz) Minus 20 dBc max. at 15 watts (0.7–6 GHz)
Spurious	Minus 73 dBc 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
Standard **Remote Interfaces** Included	
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	15.9 kg (35 lb.)
Without Cabinet	10.2 kg (22.5 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in.
Without Cabinet	48.3 x 12.7 x 37.6 cm / 19.0 x 5.0 x 14.8 in.
Export Classification:	EAR99

30S1G6 Solid State Amplifier

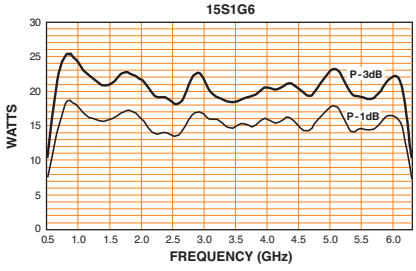
30 watts CW, 0.7–6.0 GHz

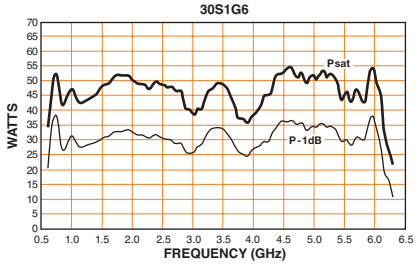
Rated Power Output	30 watts min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
Nominal 35 watts / min. 26 watts	
Power Output @ 1 dB compression	
Nominal 30 watts / min. 22 watts	
Small Signal Gain Flatness	±1.5 dB typ. / ±2.0 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	44 dB min.
Gain Adjustment (continuous range) (4096 steps remote)	10 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	50 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 30 watts
Spurious	Minus 73 dBc 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	
With Cabinet	18.2 kg (40 lb.)
Without Cabinet	12.5 kg (27.5 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 15.5 x 37.6 cm / 19.8 x 6.1 x 14.8 in.
Without Cabinet	48.3 x 12.7 x 37.6 cm / 19.0 x 5.0 x 14.8 in.
Export Classification:	EAR99

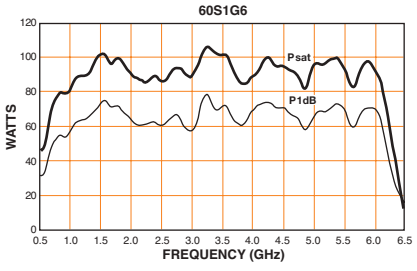
60S1G6 Solid State Amplifier

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 @ 3 dB compression	
Nominal 80 watts / min. 65 watts	
Power Output @ 1 dB compression	
Nominal 60 watts / min. 50 watts	
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	48 dB min.
Gain Adjustment (continuous range) (4096 steps remote)	10 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	56 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 60 watts (0.7–6 GHz)
Spurious	Minus 73 dBc 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	
With Cabinet	28.4 kg (62.5 lb.)
Without Cabinet	20.2 kg (44.5 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 20.3 x 54.6 cm / 19.8 x 8.0 x 21.5 in.
Without Cabinet	48.3 x 17.8 x 54.6 cm / 19.0 x 7.0 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 @ 3 dB compression	
Nominal 125 watts / min. 120 watts	
Power Output @ 1 dB compression	
Nominal 120 watts / min. 100 watts	
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	52 dB min.
Gain Adjustment (continuous range) (4096 steps remote)	10 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	58 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 125 watts (0.7–6 GHz)
Spurious	Minus 73 dBc typ.
Phase Linearity	±1 deg/100 MHz, typ.
Primary Power (selected automatically)	
90–132, 180–264 VAC	
50/60 Hz, single phase,	
1,200 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	
With Cabinet	45 kg (100 lb.)
Without Cabinet	34.5 kg (76 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 30 x 61.0 cm / 19.8 x 11.8 x 24 in.
Without Cabinet	48.3 x 26.7 x 61.0 cm / 19.0 x 10.5 x 24 in.
Export Classification:	3A001

250S1G6 Solid State Amplifier

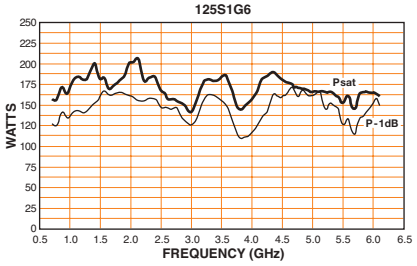
250 watts CW, 0.7–6.0 GHz

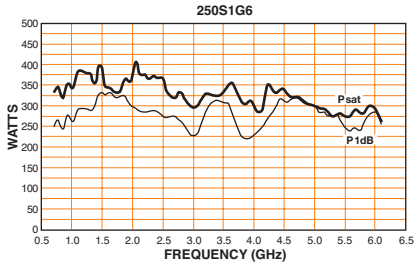
Rated Power Output	250 watts min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
Nominal 250 watts / min. 225 watts	
Power Output @ 1 dB compression	
Nominal 220 watts / min. 200 watts	
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	54 dB min.
Gain Adjustment (continuous range) (4096 steps remote)	10 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	60 dBm typ.
Noise Figure	10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 250 watts (0.75–6.0 GHz); 18 dBc typ. (0.7–0.75 GHz)
Spurious	Minus 73 dBc typ.
Phase Linearity	±1 deg/100 MHz, typ.
Primary Power (selected automatically)	
200–250 VAC	
50/60 Hz, single phase	
2,500 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	
With Cabinet	64 kg (140 lb.)
Without Cabinet	12.5 kg (27.5 lb.)
Size (WxHxD)	
With Cabinet	50.3 x 47 x 61.0 cm / 19.8 x 18.5 x 24 in.
Without Cabinet	48.3 x 44.3 x 58.5 cm / 19.0 x 17.3 x 23 in.
Export Classification:	3A001

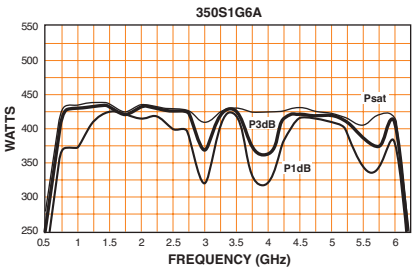
350S1G6A Solid State Amplifier

350 watts CW, 0.7–6.0 GHz

Rated Power Output	350 watts min.
Input for Rated Output	1 milliwatt max.
Power Output @ 3 dB compression	
Nominal 370 watts / min. 315 watts	
Power Output @ 1 dB compression	
Nominal 300 watts / min. 250 watts	
Flatness	±1.5 dB typ. / ±2.5 dB max.
Frequency Response	0.7–6 GHz instantaneously
Gain (at max. setting)	56 dB min.
Gain Adjustment (continuous range) (4096 steps remote)	10 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6.0:1 may limit output to 175 watts reflected power.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal	
Third Order Intercept Point	58 dBm 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	
3,600 watts max.	
Connectors	
RF input	Type N female on rear panel
RF output	Type 7-16 DIN female on rear panel
Safety Interlock	15-pin female subminiature D, rear
Remote computer interface	IEEE-488 (GPIB) and 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 lb.)
Size (WxHxD)	
50.3 x 127.0 x 61.0 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 @ 3 dB compression	
Nominal 525 watts / min. 475 watts	
Power Output @ 1 dB 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	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry. However, mismatch above 6.0:1 may limit output to 250 watts reflected power.	
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 20 dBc 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	
3,800 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) and 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 and 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 127.0 x 61.0 cm / 19.8 x 50 x 24 in.	
Export Classification:	3A001

125S1G2z5 Solid State Amplifier

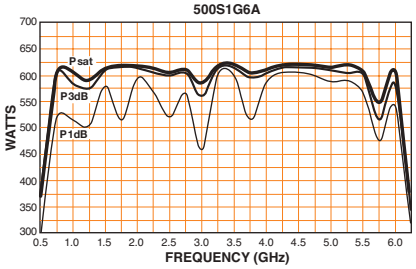
125 watts CW, 1.0–2.5 GHz

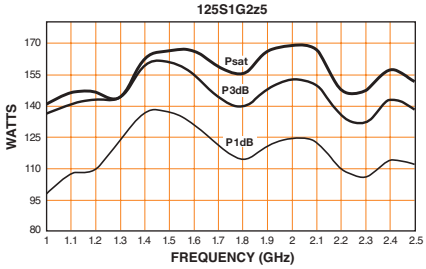
Rated Power Output	140 watts typ., 125 watts min.
Input for Rated Output	1.0 milliwatt max.
Power Output @ 3 dB compression	
Typ. 130 watts, min. 115 watts	
Power Output @ 1 dB compression	
Typ. 110 watts, min. 90 watts	
Flatness	±1.5 dB typ. / ±2.0 dB max.
Frequency Response	1.0–2.5 GHz instantaneously
Gain (at max. setting)	54 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	60 dBm typ.
Noise Figure	12 dB max.; 10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 100 watts Minus 30 dBc typ. at 100 watts
Spurious	Minus 73 dBc typ.
Primary Power (selected automatically)	
100–240 VAC	
50/60 Hz	
650 watts	
Connectors	
RF input	Type N female
RF output	Type N female
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)
Acoustical Noise @ 1 Meter	
Front: 60 dBA	
Side: 59 dBA	
Rear: 66 dBA	
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.
Environmental	
Storage Temperature	-20°C/+50°C
Export Classification:	EAR99

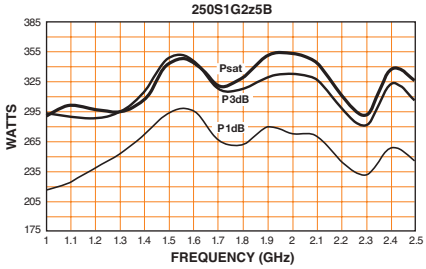
250S1G2z5B Solid State Amplifier

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 @ 3 dB compression	
Typ. 275 watts, min. 250 watts	
Power Output @ 1 dB compression	
Typ. 225 watts, min. 200 watts	
Flatness	±1.5 dB typ. / ±2.0 dB max.
Frequency Response	1.0–2.5 GHz instantaneously
Gain (at max. setting)	58 dB min.
Gain Adjustment (continuous range)	20 dB min.
Input Impedance	50 ohms, VSWR 2.0:1 max.
Output Impedance	50 ohms, nominal
Mismatch Tolerance	
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.	
Modulation Capability	
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.	
Third Order Intercept Point	62 dBm typ.
Noise Figure	12 dB max.; 10 dB typ.
Harmonic Distortion	Minus 20 dBc max. at 200 watts Minus 30 dBc typ. at 200 watts
Spurious	Minus 73 dBc typ.
Primary Power (selected automatically)	
100–240 VAC	
50/60 Hz, single phase	
1,200 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



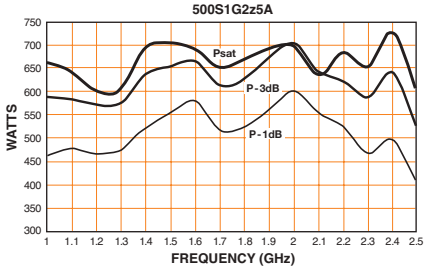




500S1G2z5A Solid State Amplifier

500 watts CW, 1.0–2.5 GHz

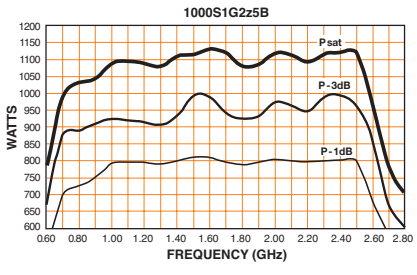
Rated Power Output 550 watts nominal, 500 watts min.
Input for Rated Output 1.0 milliwatt max.
Power Output @ 3 dB compression
Nominal 550 watts / min. 450 watts
Power Output @ 1 dB compression
Nominal 400 watts / min. 350 watts
Flatness ±1.5 dB typ. / ±2.0 dB max.
±0.5 dB typ. with internal leveling
Frequency Response 1.0–2.5 GHz instantaneously
Gain (at max. setting) 57 dB min.
Gain Adjustment (continuous range) 20 dB min.
(4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.
Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point 66 dBm typ.
Noise Figure 10 dB typ.
Harmonic Distortion Minus 20 dBc max. at 350 watts
Minus 20 dBc typ. at 500 watts
Spurious Minus 73 dBc typ.
Phase Linearity ±1.0 deg/100 MHz, typ.
Primary Power (selected automatically)
100–240 VAC
50/60 Hz
2,250 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)
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)
Acoustical Noise @ 1 Meter
Front: 56 dBA
Side: 57 dBA
Rear: 64 dBA
Weight
With Cabinet 64.9 kg (143 lb.)
Without Cabinet 50.3 kg (111 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.
Environmental
Storage Temperature -20°C/+50°C
Export Classification: EAR99



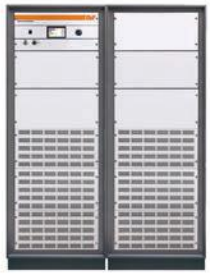
1000S1G2z5B Solid State Amplifier

1,000 watts CW, 1.0–2.5 GHz

Rated Power Output 1,000 watts min.
Input for Rated Output (0 dBm) 1 milliwatt max.
Power Output @ 3 dB compression
Nominal 1,000 watts / min. 925 watts
Power Output @ 1 dB compression
Nominal 850 watts / min. 725 watts
Flatness ±1.5 dB typ. / ±2.0 dB max.
Frequency Response 1–2.5 GHz instantaneously
Gain (at max. setting) 60 dB min.
Gain Adjustment (continuous range) 20 dB min.
(4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.
Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point 69 dBm typ.
Noise Figure 10 dB typ.
Harmonic Distortion Minus 20 dBc max. at 800 watts
Minus 20 dBc typ. at 1,000 watts
Spurious Minus 73 dBc typ.
Primary Power (selected automatically)
200–240 VAC
50/60 Hz, single phase
4,200 watts max.
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 Subminiature D
Cooling Forced air (self-contained fans)
Acoustical Noise @ 1 Meter
Front: 44 dBA
Side: 68 dBA
Rear: 72 dBA
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.
Environmental
Storage Temperature -20°C/+50°C
Export Classification: EAR99

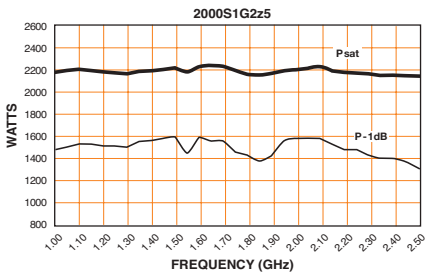


2000S1G2z5 Solid State Amplifier

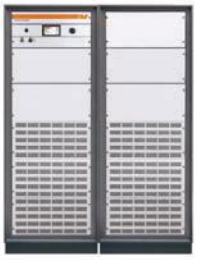


2,000 watts CW, 1.0–2.5 GHz

Rated Power Output 2,100 watts min.
Input for Rated Output 1 milliwatt max.
Power Output @ 3 dB compression
Nominal 1,850 watts / min. 1,750 watts
Power Output @ 1 dB compression
Nominal 1,500 watts / min. 1,300 watts
Average Output Power @ 3.2 GHz and Above:
Less than 60 watts
Flatness ±1.5 dB typ. / ±2.0 dB max.
Frequency Response 1–2.5 GHz instantaneously
Gain (at max. setting) 63 dB min.
Gain Adjustment (continuous range) 20 dB min.
(4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 1,000 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
*See Application Note—Importance of Mismatch Tolerance for Amplifiers Used in Susceptibility Testing.
Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point 70 dBm typ.
Noise Figure 10 dB typ.
Harmonic Distortion Minus 20 dBc max. at 1,400 watts
Spurious Minus 73 dBc typ.
Primary Power (selected automatically)
208 VAC, WYE (5-wire)
50/60 Hz, 3-phase, 12 kVA
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-in. diameter/2-in. wide casters, height adjustable over 1in.; must accommodate forklift.
Export Classification: EAR99



3000S1G2z5 Solid State Amplifier



3,000 watts CW, 1.0–2.5 GHz

Rated Power Output 3,000 watts min.
Input for Rated Output 1 milliwatt max.
Power Output @ 3 dB compression
Nominal 2,750 watts / min. 2,600 watts
Power Output @ 1 dB compression
Nominal 2,300 watts / min. 2,000 watts
Average Output Power @ 3.2 GHz And Above:
Less than 60 watts
Flatness ±1.5 dB typ. / ±2.0 dB max.
Frequency Response 1–2.5 GHz instantaneously
Gain (at max. setting) 64 dB min.
Gain Adjustment (continuous range) 20 dB min.
(4096 steps remote)
Input Impedance 50 ohms, VSWR 2.0:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance*
100% of rated power without foldback up to 6.0:1 mismatch above which may limit to 1,500 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
*See Application Note—Importance of Mismatch Tolerance for Amplifiers Used in Susceptibility Testing.
Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point 72 dBm typ.
Noise Figure 10 dB typ.
Harmonic Distortion Minus 20 dBc max. at 2,200 watts
Spurious Minus 73 dBc typ.
Primary Power (selected automatically)
208 VAC, WYE (5-wire)
50/60 Hz, 3-phase, 17.5 kVA
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) 2 joined cabinets:
111.8 x 149.9 x 83 cm / 44.0 x 59 x 32.4 in.
Base Requirements: 3 in. diameter/2 in. wide casters, height adjustable over 1 in. Must accommodate forklift.
Export Classification: EAR99

20S6G18-L Solid State Amplifier

20 watts CW, 6.0–18 GHz

Rated Power Output 20 watts min.
Input for Rated Output 1 milliwatt max., 0 dBm
Power Output @ 3 dB compression
Nominal 25 watts / min. 18 watts
Power Output @ 1 dB compression
Nominal 22 watts / min. 15 watts
Power Gain Flatness (0 dBm IN) ±2 dB typ. / ±3 dB max.
Frequency Response 6.0–18 GHz instantaneously
Gain (at max. setting) 43 dB min.
Gain Adjustment (continuous range) 10 dB min.
Input Impedance 50 ohms, VSWR 2.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.
Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point 49 dBm typ.
Harmonic Distortion Minus 20 dBc 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 front panel
RF output Precision 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 (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

40S6G18-L Solid State Amplifier

40 watts CW, 6.0–18 GHz

Rated Power Output 40 watts min.
Input for Rated Output 1 milliwatt max., 0 dBm
Power Output @ 3 dB compression
Nominal 45 watts / min. 35 watts
Power Output @ 1 dB compression
Nominal 30 watts / min. 22 watts
Power Gain Flatness (0 dBm IN) ±2 dB typ. / ±3 dB max.
Frequency Response 6.0–18 GHz instantaneously
Gain (at max. setting) 46 dB min.
Gain Adjustment (continuous range) 10 dB min.
Input Impedance 50 ohms, VSWR 2.5:1 max.
Output Impedance 50 ohms, nominal
Mismatch Tolerance
Will operate without damage or oscillation when connected to any load impedance without the aid of foldback circuitry.
Modulation Capability
Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.
Third Order Intercept Point 52 dBm typ.
Harmonic Distortion Minus 20 dBc max. at 40 watts
Primary Power (selected automatically)
100–240 VAC
50/60 Hz, single phase
<1,200 watts max.
Connectors
RF input Precision N female on front panel
RF output Precision 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 (internal self-contained liquid)
Weight w/cabinet: 35 kg (77 lb.)
w/o cabinet: 25.9 kg (57 lb.)
Size (WxHxD)
w/cabinet: 50.2 x 20.6 x 63.2 cm / 19.8 x 8.1 x 24.9 in.
w/o cabinet: 48.3 x 18.0 x 62.5 cm / 19.0 x 7.1 x 24.6 in.
Export Classification: 3A001