

# Amplifiers

## Model AR-G400

### Features:

- 400 W CW, 0.8 – 6.0 GHz
- Class A operation
- 100% mismatch tolerant with no foldback
- Ethernet, USB, RS232 & GPIB interface
- Built in Calibrated Directional Coupler
- 3 Year Warranty

To view our full amplifier portfolio visit:  
[www.arworld.us/ar-amplifiers](http://www.arworld.us/ar-amplifiers)

Amplifier Research Corporation  
160 Schoolhouse Rd  
Souderton, PA 18964  
215.723.8181  
info@arworld.us  
www.arworld.us  
ISO 9001:2015 Certified  
ISO 17025 :2017 Accredited



New class A, high power density, design has allowed us to produce a 400 watt, 0.8 GHz to 6 GHz amplifier in a compact 7U package. With a minimum of 400 watts of linear power this amplifier is ideal for RF immunity testing in a GTEM Cell or with a wide range of available horn antenna such as the Teseq BHA range. Readily integrated with the Teseq NSG 6000 80 MHz to 6 GHz test system these amplifiers can form part of a broadband RF test system. The new touch screen color display gives an immediate visual indication of forward and reverse power along with the current operating status of the amplifier and access to diagnostic information such as gate current and heatsink temperature.

Fan speed adjusts depending on the heatsink temperature thus ensuring the minimum audio noise level possible in the operating environment. The inbuilt calibrated forward power coupler provides a quick and easy way to monitor forward power with any power meter. Input overdrive protection prevents damage to the input devices due to accidental high input power.

Multiple remote interfaces are available as standard including USB, GPIB, RS232, and Ethernet. Amplifier gain can be controlled either remotely through one of the available interfaces or via the front panel touch screen.

The export classification for this equipment is 3A001. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

Model AR-G400

- 400 W
- 0.8 – 6.0 GHz

<b>Electrical Specifications</b>	
<b>Parameter</b>	<b>Value</b>
Frequency Bands	Single Band
Frequency (min.) GHz	0.8 GHz
Frequency (max.) GHz	6 GHz
Psat (min)	500 W
P1dB (min.)	400 W
Small Signal Gain	56 dB
Gain Variation (max) ±	+/- 3.0 dB
Harmonics @ P1dB (typ)	-18 dBc
Spurious (min.)	-70 dBc
3rd Order Intercept Point	10 dB > P1dB
RF Sample Port Coupling Factor (nom)	50 dB
Modulation Formats	AM, FM, PM, OFDM
Maximum Input Power (no damage)	10 dBm
Gain Control	0-30 dB in 255 Steps
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unconditional
Output Impedance	50 Ohm
Input VSWR	2:1 (max)
Output VSWR	2:1 (typical)

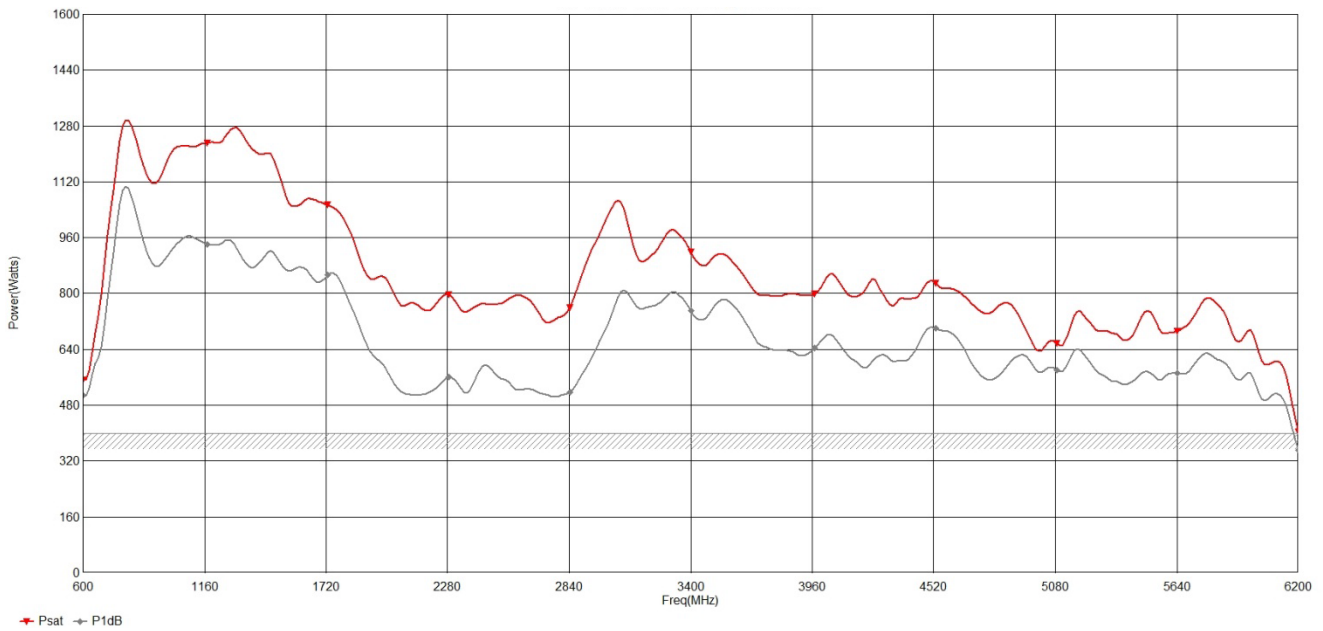
<b>General Specifications</b>	
<b>Parameter</b>	<b>Value</b>
Safety Interlock	Via rear panel mounted BNC-female
Supply Voltage	See Available Variants table on next page
Supply Frequency	47 - 63
Supply Power (Typ.)	5.5 kVA
RF Input Connector	Type N female
RF Output Connector	Type 7/16 female
RF Sample Port Connectors	Type N female
Com Interface	GPIB, RS232, Ethernet & USB
Weight kg	160 kg
Dimensions	See Available Variants table on next page
Cooling System	Air Cooled, Self-contained

Model AR-G400

- 400 W
- 0.8 – 6.0 GHz

Available Variants		
Product	Configuration	Item #
AR-G400-001	Front Panel RF Connectors, 1 Phase 180 to 265 VAC x 2 (19 inch, 16U Rack)	3-342432
AR-G400-002	Rear Panel RF Connectors, 1 Phase 180 to 265 VAC x 2 (19 inch, 16U Rack)	3-342433
AR-G400-003	Front Panel RF Connectors, 3 Phase, STAR 5 Wire 380 to 415 VAC Line to Line + N (19 inch, 20U Rack)	3-342434
AR-G400-004	Rear Panel RF Connectors, 3 Phase, STAR 5 Wire 380 to 415 VAC Line to Line + N (19 inch, 20U Rack)	3-342435
AR-G400-005	Front Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line (19 inch, 20U Rack)	3-342436
AR-G400-006	Rear Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line (19 inch, 20U Rack)	3-342437

TYPICAL PSAT POWER @ 0dBm INPUT



Amplifier Research Corporation • 160 Schoolhouse Rd, Souderton, PA 18964

To order AR Products, call: 215.723.8181. For an applications engineer, call: 800.933.8181. Direct to Service call: 215.723.0275 or email: [service@arworld.us](mailto:service@arworld.us)

For Faxing Orders: 866.859.0582 (Orders Only Please) [info@arworld.us](mailto:info@arworld.us)

Approved for public release by Amplifier Research Corporation. ISO 9001:2015 Certified • ISO 17025:2017 accredited

Revision 021524