

Features

- 1000A400
- 1000 watts CW
- 10kHz-400MHz
- Class A
- Portable
- Full VSWRtolerant
- CE & RoHS Compliant

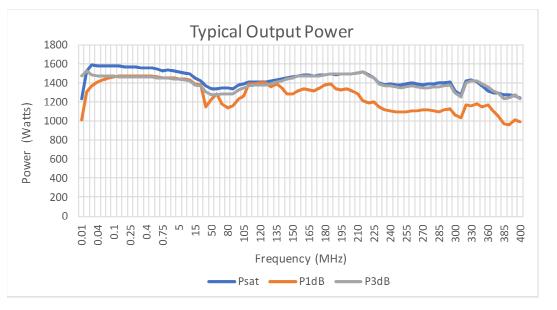
The Model 1000A400 is a solid-state, selfcontained, air-cooled, broadband amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required.

The Model 1000A400, when used with a sweep generator, will provide a minimum of 1000 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 1000A400 is protected from RF input overdrive by an RF input leveling circuit which controls the RF input level to the RF amplifier first stage when the RF input level is increased above OdBm. The RF amplifier stages are protected from over-temperature by removing the DC voltage to them if an over-temperature condition occurs due to cooling blockage or fan failure. The Model 1000A400 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a color LCD touch screen display to indicate the operate status and fault conditions if an over-temperature or power

supply fault has occurred. The unit can be returned to operate when the condition has been cleared.

All amplifier control functions and status indications are available remotely through the included Remotes Package. The Remotes Package includes GPIB/IEEE-488 format, RS-232 hardwire and fiber optic, USB, and Ethernet. The bus interface connector is located on the back panel and positive control of local or remote operation is assured by a Local/Remote switch on the front panel of the amplifier. Also included with the Remotes Package is a safety interlock circuit for use with external safety switch interlocks. This circuit prevents the amplifier from going into operate mode unless the external connection is made. A jumper plug is provided for cases where this functionality is not needed. Optional RF sample ports are available to allow for any forward and reverse power monitoring.

The export classification for this equipment is EAR99.



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www.arworld.us

ISO 9001 Certified



Specifications

- 1000A400
- 1000 watts CW
- 10kHz-400MHz

RATED OUTPUT POWER: 1200 watts typical, 1000 watts minimum

INPUT FOR RATED OUTPUT: 1.0 mW Max

POWER OUTPUT @ 3dB COMPRESSION: Typical: 1200 watts, Minimum: 1000 watts

POWER OUTPUT @ 1dB COMPRESSION: Typical: 1000 watts, Minimum: 800 watts

FLATNESS: ±1.5 dB typical, ±2.0 dB maximum

FREQUENCY RESPONSE: 10kHz-400 MHz instantaneously

GAIN (at maximum setting): 60 dB minimum

GAIN ADJUSTMENT (Continuous Range): 25 dB minimum

INPUT IMPEDANCE: 50 ohms, VSWR 2.0:1 maximum

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 input signal.

THIRD ORDER INTERCEPT: 68 dBm typical

NOISE FIGURE: 8 dB typical

HARMONIC DISTORTION: Minus 20 dBc maximum at 1000 watts

SPURIOUS: Minus 73 dBc typical

PRIMARY POWER: 200-240 VAC, 3-phase, 50/60Hz, 5.2 kW

CONNECTORS:

RF Input: N female RF Output: 7-16 DIN female, rear

REMOTES PACKAGE:

IEEE-488:	24-pin female
RS-232:	9-pin subminiature D (female)
Fiber optic:	ST Conn Tx and Rx RS-232
USB 2.0:	Туре В
Ethernet:	RJ-45
Safety Interlock:	15-pin subminiature D

COOLING: Forced air (self contained fans)

WEIGHT: 124.8 kg (275 lbs)

SIZE (W x H x D):

56.1 x 97.8 x 82.5 cm (22.1 x 38.5 x 32.5 in)

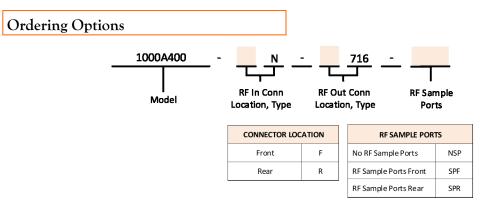
ENVIRONMENTAL:

Operating Temperature: 5°C / +40°C Operating Altitude: Up to 2000M Shock and vibration: Normal Truck Transport

REGULATORY COMPLIANCE:

EMC EN 61326-1 Safety UL 61010-1 CAN/CSA C22.2 #61010-1 CENELEC EN 61010-1 RoHS DIRECTIVE 2011/65/EU

EXPORT CLASSIFICATION: EAR99

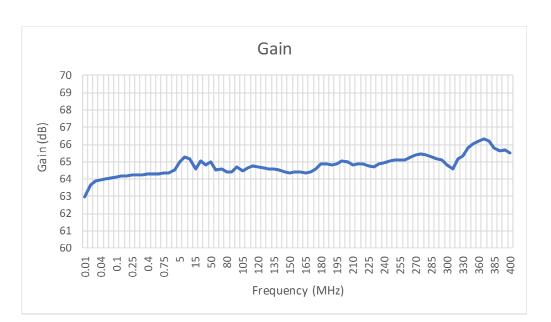


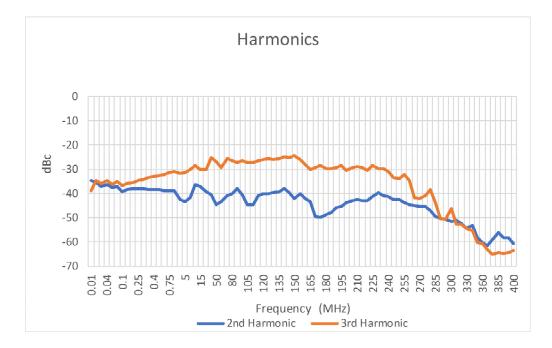
Contact your AR RF/Microwave Instrumentation Sales Associate for specific model configuration pricing.

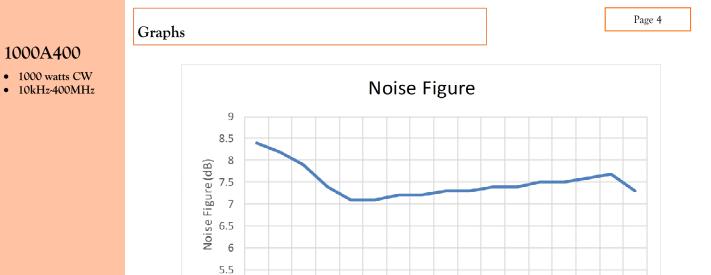
1000A400

Graphs

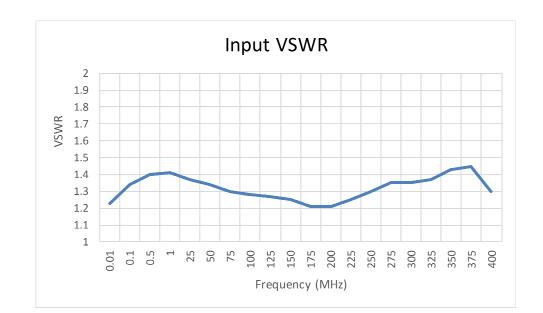
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- 10kHz-400MHz







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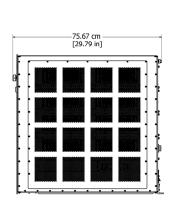
10 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 Frequency (MHz)

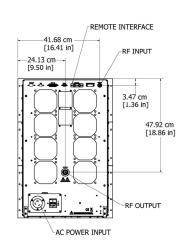
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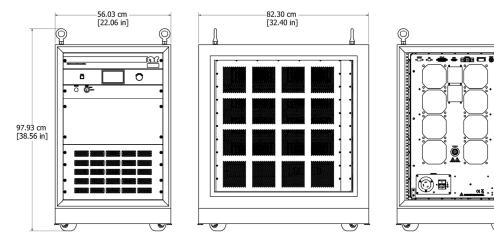
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-48.26 cm [19.00 in] 6.36 cm [2.51 in] POWER ON BUTTON <u>1</u>007-17.83 cm [7.02 in] ð 0 -ā ā-RF INPUT-ALTERNATE LOCATION -LOCAL/ REMOTE SWITCH 71.04 cm [27.97 in]

Envelope Drawing







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