500W1000C

80 MHz - 1000 MHz, Class A Solid State Amplifier

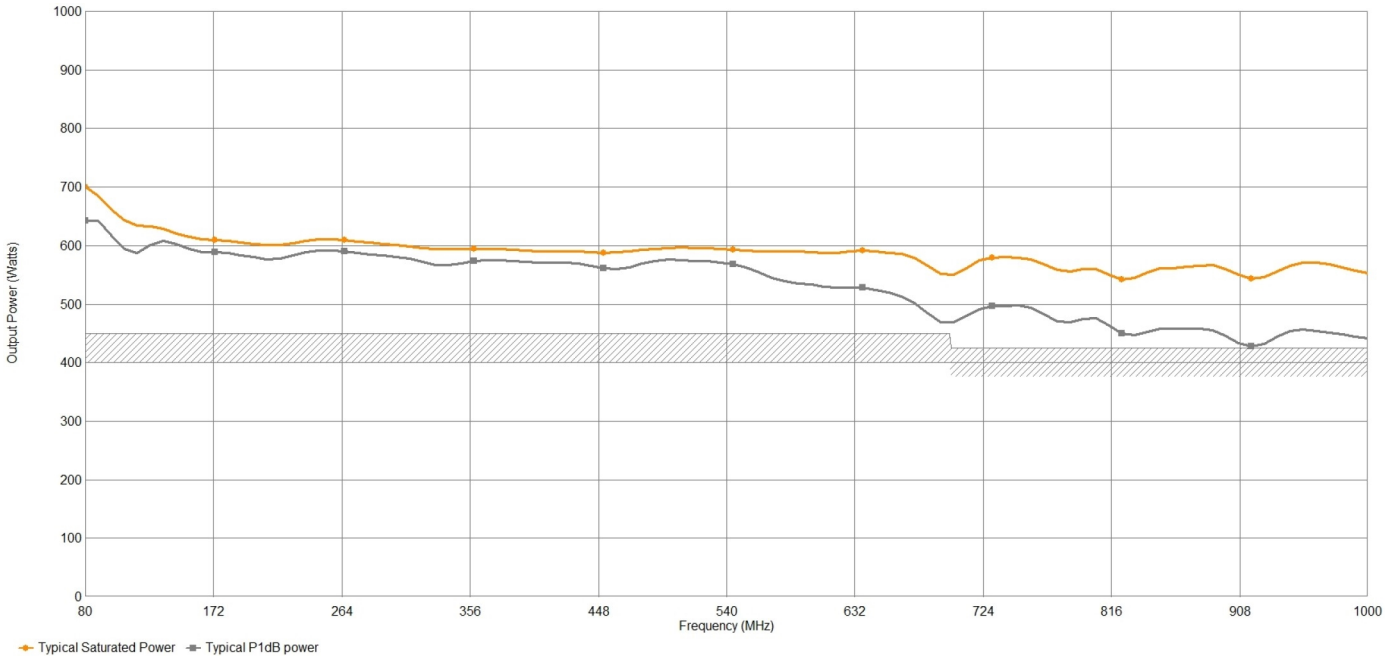
MAIN FEATURES

- **Class A Operation**
- **Touch Screen Display**
- **100% Mismatch Tolerant**
- **Scalable Modular Construction**
- **Ethernet, USB, GPIB, RS-232 Remote Interface**
- **3 Year Warranty**
- **Applications: Radiated immunity (ISO, IEC, MIL), Telecom Component Test and Aerospace & Defence**

The Model 500W1000C is a self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth and high gain are required. When used with an RF sweep generator, nominally provides over 500 watts of RF power and a minimum 425 watts of P1dB power.

The amplifier 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 and a single rotary knob to offer status reporting and control capability. The display provides operational presentation of Forward Power and Reflected Power plus amplifier status. All amplifier control functions, and status indications are available remotely in GPIB/IEEE- 488 format and RS-232 hardware 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 keylock on the front panel of the amplifier.

The export classification for this equipment is EAR99. 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.



Technical Specifications

Frequency Range	80 - 1000 MHz
Rated Output Power	500W (min) - 600W (typ)
Power Output @ 1dB Compression	80-700MHz - 450W (min) - 500W (typ)
Power Output @ 1dB Compression	700-1000MHz - 425W (min)
Input for Rated Output	0dBm (1mW)
Small Signal Gain	57 dB
Gain Variation (max) ±	+/-1.0dB (typ) | +/- 1.5dB (max) dB
Gain Control Adjust When Below P1dB	20 dB
Harmonics @ P1dB (min)	-20 dBc
Spurious (typ)	-73 dBc
Input VSWR	1.3:1 (typ) - 1.5:1 (max)
Output VSWR	2:1 (typ)
Output Impedance	50 Ohm
3rd Order Intercept Point	63 dB
Noise Figure (typ)	8 dBm
Modulation Formats	AM, FM, PM, ODFM
Maximum Input Power (no damage)	13 dBm
Output VSWR Tolerance	Infinite any Phase (No Foldback)
Stability	Unconditional

General Specifications

Acoustic Noise (measured @ 1 m)	60 dBA
Supply Frequency	47 to 63 (Hz)
Supply Voltage	100 to 240 VAC
Supply Power (max)	1.8 KVA

Mechanical Specifications

RF Input Connector	Type-N Female
RF Output Connector	Type-N Female
RF Sample Port Connectors	Optional, Type-N Female, (coupling factor 57 dB typical)
Safety Interlock	15-Pin Subminiature D Female
Dimentions (With Cabinet) (W x H x D)	50.3 x 38.1 x 74.9 cm (19.8 x 15 x 29.5 in)
Weight (With Cabinet)	69.4 kg (153 lbs)
Dimentions (No Cabinet) (W x H x D)	(8U) 48.3 x 35.6 x 74.9 cm (19.0 x 14.0 x 29.5 in)
Weight (No Cabinet)	50.8 kg (112 lbs)
Cooling System	Forced air (self contained fans)
Com. Interface	IEEE-488 / RS-232 / RS-232 (fiber optic) / USB 2.0 / Ethernet

Environmental Specifications

Ambient Running Temperature	+5°C to +40°C
Storage Temperature	-20°C to +50°C
Maximum Altitude	up to 2000m
Shock and Vibration	Normal Truck Transport

Regulatory Compliance (CE)

EMC	EN 61326-1
Safety	UL 61010-1
RoHS	DIRECTIVE 2011-65-EU
Export Classification	No Licence Required

Ordering Information

500W1000C - [ ] - N - [ ] - N - [ ] - [ ]

- 500W1000C: Model
- [ ] - N: RF In Conn Location, Type
- [ ] - N: RF Out Conn Location, Type
- [ ]: Enclosure No Enclosure
- [ ]: RF Sample Ports

CONNECTOR LOCATION	
Front	F
Rear	R

ENCLOSURE	
Enclosure	E
No Enclosure	NE

RF SAMPLE PORTS	
No RF Sample Ports	NSP
RF Sample Ports Front	SPF
RF Sample Ports Rear	SPR