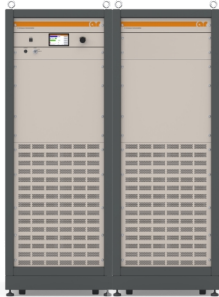


# 10000A225D

## 10 KHz - 225 MHz, Class A Solid State Amplifier



### MAIN FEATURES

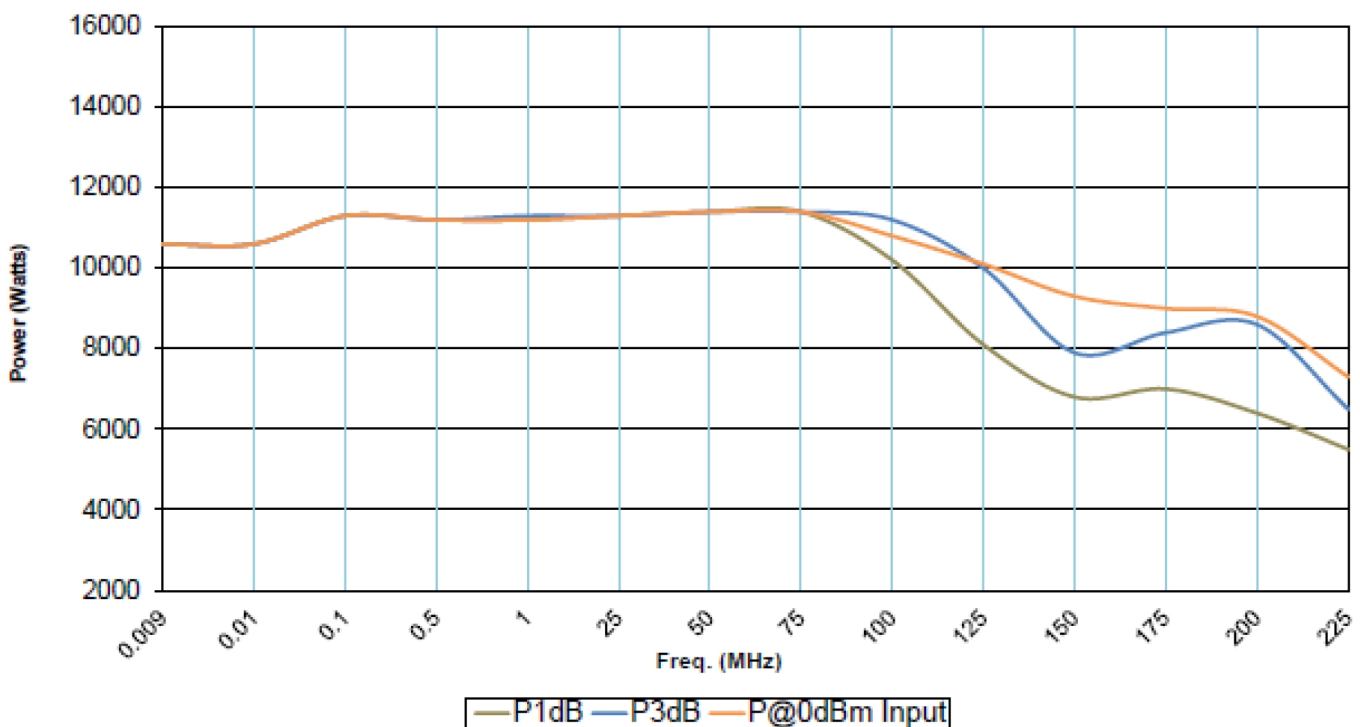
- **Class A Operation**
- **Touch Screen Display**
- **100% Mismatch Tolerant**
- **Scalable Modular Construction**
- **Ethernet, USB, GPIB, Fiber-optic & RS-232 Remote Interface**
- **3 Year Warranty**
- **Applications: Radiated immunity (ISO, IEC, MIL)**

The updated 10000A225D is a solid-state, Class A design, self-contained, air-cooled, broadband power amplifier. It is designed for applications requiring instantaneous bandwidth, high gain, and linearity, providing a minimum of 10 kW of RF power. The amplifier features protection from input overdrive beyond 0 dBm, as well as safeguards against various failure conditions including over-temperature and power supply faults.

An easy-to-read front panel display indicates operational status and fault conditions. All amplifier control functions and status indications are available remotely using GPIB/IEEE-488, RS-232, fibre-optic serial, USB, or Ethernet. Interface connectors are located on the back panel. Local and remote operation can be managed by a switch on the front panel.

This high-power Class A amplifier is ideal for EMC test applications due to its low level of spurious signals and exceptional linearity, enabling continued operation into high VSWR loads.

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	0.01 - 225 MHz
Rated Output Power	0.01-100MHz - 12000W (min) - 12500W (typ)
Rated Output Power	100-225MHz - 7000W (min) - 9500W (typ)
Power Output @ 3dB Compression	0.01-50MHz - 10000W (min) - 12000W (typ)
Power Output @ 3dB Compression	50-100MHz - 9500W (min) - 1200W (typ)
Power Output @ 3dB Compression	100-150MHz - 7500W (min) - 9500W (typ)
Power Output @ 3dB Compression	150-225MHz - 6500W (min) - 8000W (typ)
Power Output @ 1dB Compression	0.01-50MHz - 10000W (min) - 11000W (typ)
Power Output @ 1dB Compression	50-100MHz - 8000W (min) - 9000W (typ)
Power Output @ 1dB Compression	100-150MHz - 5500W (min) - 8000W (typ)
Power Output @ 1dB Compression	150-225MHz - 5000W (min) - 5500W (typ)
Input for Rated Output	0dBm (1mW)
Small Signal Gain	70 dB
Small Signal Gain Flatness (-20 dBm Input)	+/- 1.5dB (min) +/- 2.5dB (typ)
Gain Control Adjust When Below P1dB	20 dB
Harmonics @ P1dB H2 & H3	@7500W -30dBc (typ) / -20dBc (max)
Spurious (typ)	-73 dBc
Input VSWR	1.5:1 (max)
Output VSWR	2:1 (typ)
Output Impedance	50 Ohm
3rd Order Intercept Point	77 dB
Noise Figure (typ)	15 dBm
Modulation Formats	AM, FM, PM, ODFM
Maximum Input Power (no damage)	13 dBm
Output VSWR Tolerance	50% with Foldback > 6:1

### General Specifications

Acoustic Noise (measured @ 1 m)	83 dBA
Supply Frequency	47 to 63 (Hz)
Three Phase 5 Wire WYE Low Line	See Configuration Table VAC
Three Phase 5 Wire WYE	See Configuration Table VAC
Supply Power (max)	43 KVA

### Mechanical Specifications

RF Input Connector	Type-N Female
RF Output Connector	Type-1-5/8 Female
RF Sample Port Connectors	Type-N Female, (coupling factor 70 dB typical)
Safety Interlock	15-Pin Subminiature D Female
Dimensions (With Cabinet) (W x H x D)	2 x 35U Rack 112.2 x 181.6 x 97.8 cm (44.2 x 71.5 x 38.5 in)
Weight (With Cabinet)	590 kg (1300 lb)
Cooling System	Forced air (self contained fans)
Com. Interface	IEEE-488 / RS-232 / RS-232 (fibre optic) / USB 2.0 / Ethernet

## Environmental Specifications

Ambient Running Temperature	5°C to +40°C
Storage Temperature	-20°C to +50°C
Maximum Altitude	2000 m
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

## Available Configurations

Product	Configuration	Item #
10000A225D (HV)	Rear Panel N-Type RF Input, N-Type RF Sample Ports & 1-5/8 RF Output Connectors, HV Three Phase 380 - 415 VAC	10057082
10000A225D (LV)	Rear Panel N-Type RF Input, N-Type RF Sample Ports & 1-5/8 RF Output Connectors, LV Three Phase 200 - 240 VAC	10057079
10000A225DM2 (HV)	Rear Panel N-Type RF Input, 1-5/8 RF Output Connectors, Front Panel N-Type RF Sample Ports, HV Three Phase 380 - 415 VAC	10057157
10000A225DM2 (LV)	Rear Panel N-Type RF Input, 1-5/8 RF Output Connectors, Front Panel N-Type RF Sample Ports, LV Three Phase 200 - 240 VAC	10057156
10000A225DM3 (HV)	Front Panel N-Type RF Input, N-Type RF Sample Ports, Rear Panel 1-5/8 RF Output Connectors, HV Three Phase 380 - 415 VAC	10057159
10000A225DM3 (LV)	Front Panel N-Type RF Input, N-Type RF Sample Ports, Rear Panel 1-5/8 RF Output Connectors, LV Three Phase 200 - 240 VAC	10057158