



**Model 600A225A,
M1 through M9
600 Watts CW
10kHz–225MHz**

The Model 600A225A is a self-contained, air-cooled, broadband, completely solid state amplifier designed for applications where instantaneous bandwidth and high gain are required. Push-pull LDMOS circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 600A225A, when used with an RF sweep generator, will provide a minimum of 600 watts of swept power.

The Model 600A225A 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 control status and reports of internal amplifier status. Special features include a gain control, pulse input capability, forward RF sample port, and a reflective RF sample port for precise power measurements.

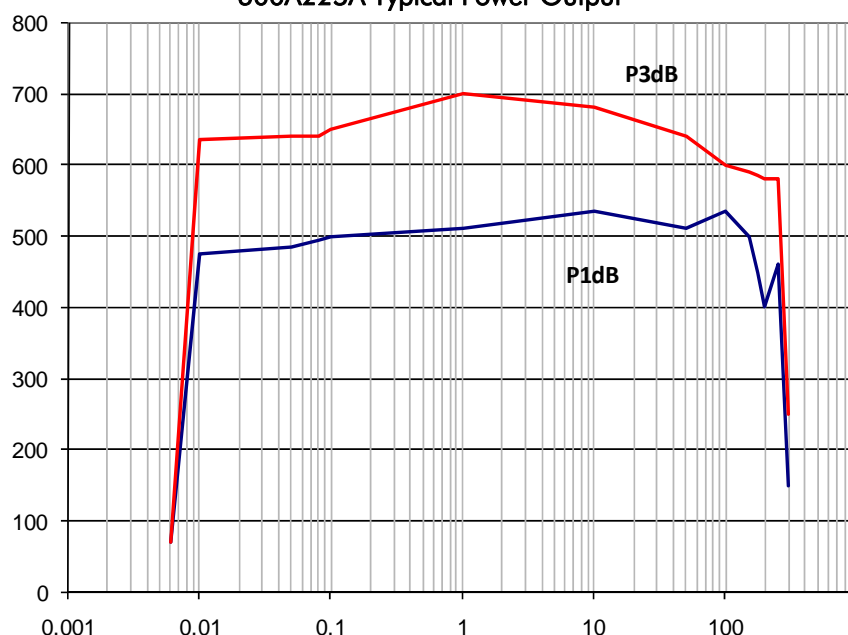
All amplifier control functions and status indications are available remotely in GPIB/IEEE-488, RS-232, RS-232 fiber optic, Ethernet and USB format. The buss interface connectors are located on the back panel and positive control of local or remote operation is assured by a switch on the front panel of the amplifier.

High efficiency universal input, power factor corrected switching power supplies provides DC to all internal sub-assemblies.

Housed in a stylish, contemporary enclosure, the Model 600A225A provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, particle accelerators, plasma generation, communications and use as a driver for higher power amplifiers.

The export classification of 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.

600A225A Typical Power Output



SPECIFICATIONS, MODEL 600A225A

| | |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RATED OUTPUT POWER | 600 watts |
| INPUT FOR RATED OUTPUT | 1.0 milliwatt maximum |
| POWER OUTPUT @ 3 dB compression | |
| Nominal | 600 watts |
| Minimum | 550 watts |
| POWER OUTPUT @ 1 dB compression | |
| Nominal | 550 watts |
| Minimum | 400 watts |
| FLATNESS..... | ± 2.5 dB maximum |
| FREQUENCY RESPONSE | 10 kHz–250 MHz instantaneously |
| GAIN (at maximum setting) | 58 dB minimum |
| GAIN ADJUSTMENT (continuous range)..... | 20 dB minimum |
| INPUT IMPEDANCE..... | 50 ohms, VSWR 1.5:1 maximum |
| OUTPUT IMPEDANCE | 50 ohms, nominal |
| MISMATCH TOLERANCE..... | 100% rated power without foldback up to 6.0:1 mismatch, above which may limit to 300W reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. |
| MODULATION CAPABILITY..... | Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal |
| HARMONIC DISTORTION..... | Minus 20 dBc maximum at 400 watts |
| THIRD ORDER INTERCEPT POINT | 65 dBm typical |
| RF POWER DISPLAY | 0–750 watts full scale |
| PRIMARY POWER | 180–264 VAC 47–63 Hz, 2500 watts maximum @ 0.99 P.F. typical |
| CONNECTORS | |
| RF input | See Model Configuration |
| RF output | See Model Configuration |
| Forward Sample..... | BNC female on front panel (coupling factor 60 dB typical) |
| Reverse Sample..... | BNC female on front panel (coupling factor 60 dB typical) |
| Pulse Modulation Input..... | BNC female on rear panel |
| Safety Interlock..... | 15 pin female Type D on rear panel |
| REMOTE CONTROL | |
| IEEE-488..... | 24-pin female on rear panel |
| RS-232 | 9 pin female Type D on rear panel |
| RS-232 (Fiber optic)..... | Type ST on rear panel |
| USB..... | Type B female on rear panel |
| Ethernet | RJ-45 |
| COOLING..... | Forced air (self-contained fans) |
| WEIGHT, maximum | See Model Configurations |
| SIZE (W x H x D)..... | See Model Configurations |
| EXPORT CLASSIFICATION | EAR99 |

MODEL CONFIGURATIONS

| Model Number | RF Input | RF Output | Weight | Size |
|---------------------|--------------------------------------------------------------|-----------------------|------------------|------------------------------------------------|
| 600A225A | Type N female, front | Type N female, front | 45.8 kg (101 lb) | 50.3 x 34 x 56.9 cm 19.8 x 13.4 x 22.0 in |
| 600A225AM1 | Type N female, rear | Type N female, rear | 45.8 kg (101 lb) | 50.3 x 34 x 56.9 cm 19.8 x 13.4 x 22.0 in |
| 600A225AM2 | BNC female, rear | 7-16 DIN female, rear | 45.8 kg (101 lb) | 50.3 x 34 x 56.9 cm 19.8 x 13.4 x 22.0 in |
| 600A225AM3 | See separate specification sheet. | | | |
| 600A225AM4 | Same as 600A225AM2 with enclosure removed for rack mounting. | | 35.4 kg (78 lb) | 48.3 x 30.5 x 54.4 cm 19.0 x 12.0 x 21.4 in |
| 600A225AM5 | Type N female, front | 7-16 DIN female, rear | 45.8 kg (101 lb) | 50.3 x 34 x 56.9 cm 19.8 x 13.4 x 22.0 in |
| 600A225AM6 | Same as 600A225AM1 with enclosure removed for rack mounting. | | 35.4 kg (78 lb) | 48.3 x 30.5 x 54.4 cm 19.0 x 12.0 x 21.4 in |
| 600A225AM7 | Type N female, front | Type N female, rear | 45.8 kg (101 lb) | 50.3 x 34 x 56.9 cm 19.8 x 13.4 x 22.0 in |
| 600A225AM8 | BNC female, rear | Type N female, rear | 35.4 kg (78 lb) | 48.3 x 30.5 x 54.4 cm 19.0 x 12.0 x 21.4 in |
| | Enclosure removed for rack mounting | | | |
| 600A225AM9 | Same as 600A225A with enclosure removed for rack mounting. | | 35.4 kg (78 lb) | 48.3 x 30.5 x 54.4 cm 19.0 x 12.0 x 21.4 in |