



DS INSTRUMENTS

## 2.5GHZ HALF-WATT AMP



### Description

The new **PA2500L** provides a convenient and flexible way to amplify signals from 5MHz-to 2.5GHz for a variety of RF applications. The USB Type-C port allows for easy integration into automated test environments using SCPI serial commands. Power and **gain control** along with temperature and voltage monitoring make this device much faster to setup and implement than competing devices. All linear regulation, gate biasing, and power-up sequencing are done internally by the onboard controller. This amplifier is powered from USB and does not need a separate adapter or input.

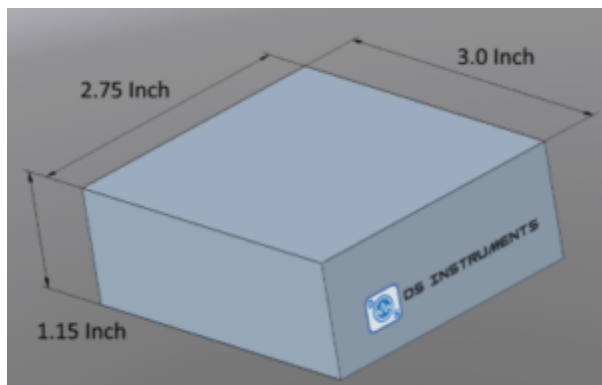
### Amplifier Features:

- Frequency Range: **5MHz – 2.5GHz**
- Amplifier Gain (Max): **~30dB**
- Amplifier Gain (Min): **~0dB**
- Gain step size: **0.5dB**
- Typical output power (P1dB): **+27dBm (1/2-Watt)**
- Saturated output power: **>+29dBm**
- Max input power (before damage): **+10dBm**
- Connectors: **18GHz Microwave Gold SMA**
- Return Loss: **> 12dB**
- USB Type-C virtual com port
- Power Input: **Standard USB Type-C**

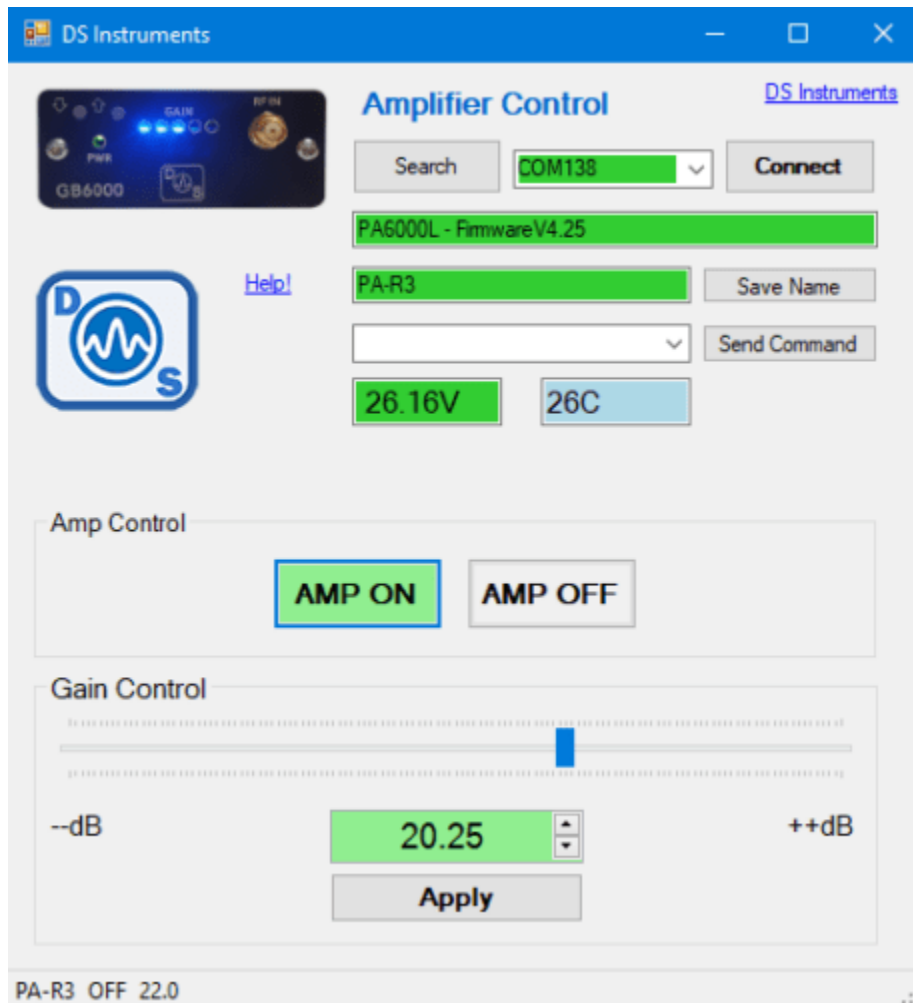
### PA2500L Typical Applications

- Automated testing environments
- Production verification
- Educational / university lab use
- Aerospace / defense research
- Wireless infrastructure
- Antenna research
- Communication link design
- EMC testing

### Mechanical Information

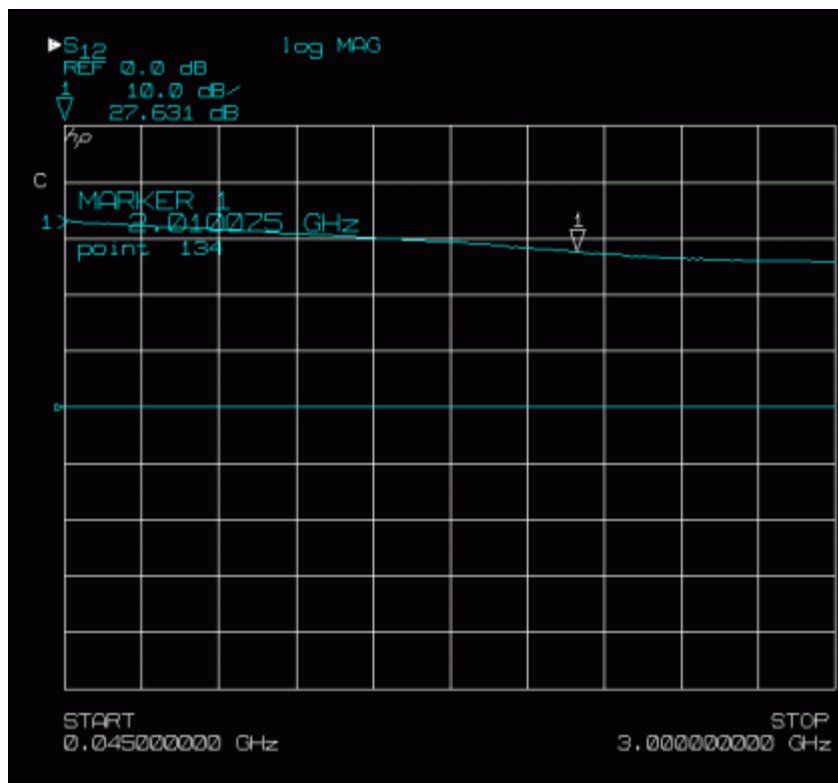


PC Control Software (USB):



Power Amplifier Performance Plots

Max gain setting (small signal):



Minimum gain setting:

