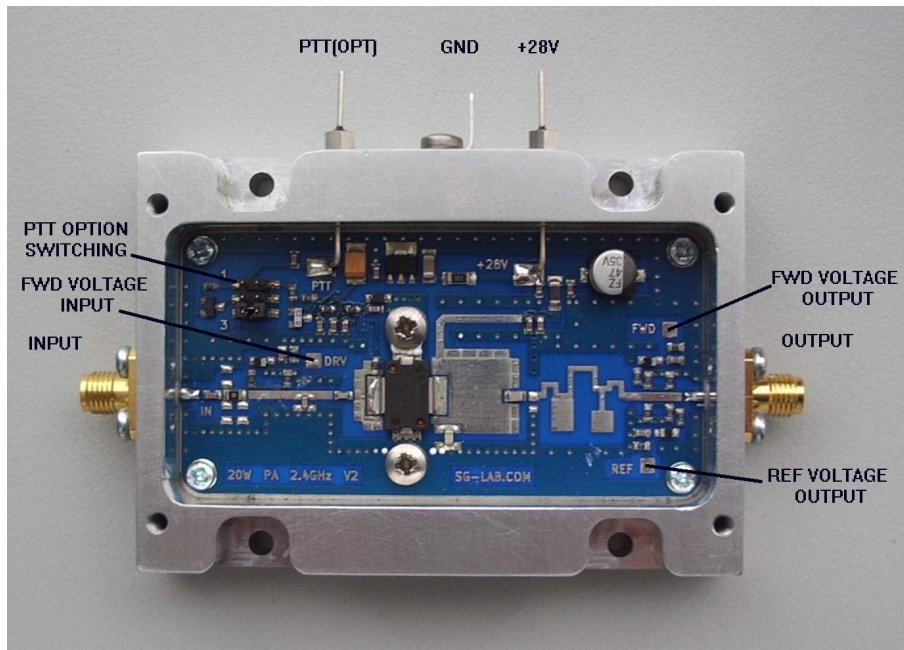


SG Lab

2.4 GHz 20W Power Amplifier V2



Specifications

	Min.	Typ.	Max.
Frequency range RF	2.38 GHz	2.4 GHz	2.43 GHz
Output Power at 28V DC	18 W	20 W	22 W
Output Power at 24V DC	15 W	17 W	
Power Gain		16dB	
Input Power		0.5 W	0.8 W
Power Supply Voltage	24 V	28 V	28 V
Quiescent current	0.3 A	0.4 A	0.45 A
Current Consumption at 20W out		1.45 A	1.5 A
Efficiency		50,00%	
Dimensions without SMA conn.		82 x 57 x 19 mm	

Features

LDMOS transistor

20W output power

16 dB power gain

Internal Directional Couplers with diode detectors at PA Input and Output

3 Different options for Transistor Bias Voltage switching

Transistor Bias Voltage (PTT) Switching options

Selectable by Jumper:

1. PTT is switched ON by connecting PTT pin to the ground.
2. PTT is switched ON by applying +3....+12V to PTT pin
3. PTT is switched ON simultaneously with Power Supply Voltage.

Directional Coupler Voltages:

1. FWD Voltage Input 0.5V typ. @ 0.5W input power
2. FWD Voltage Output 3.5V typ. @ 20W Output power
3. REF Voltage Output - reflected wave , can be used to calculate estimated output SWR

