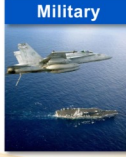


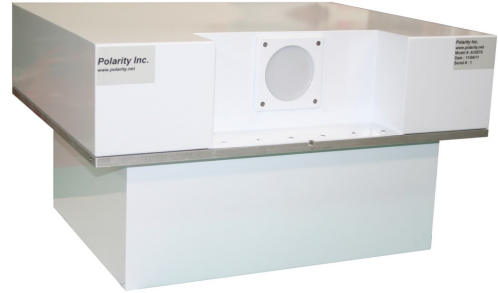
**POL800W**

# Powered by **Polarity**<sup>®</sup>

**A Global Leader in Power Solutions**



AS 9100:2009 REV C



## **800 Watt W Band HPA**

### **High Power W Band Amplifier**

**Ideally suited for demanding performance in next generation high power weather radar systems. Meeting international standards for safety and EMI/EMC.**

#### **RF Performance**

- **Frequency: 95GHz +/-50MHz**
- **RF Output Power: 800W, 59dBm**
- **Gain: 50dB**
- **Temperature range: -20C to +50C**

#### **Built-in protection**

- **3us electronic crowbar**
- **Output RF arc detector**
- **Input isolator**
- **Reverse power detection**

#### **Additional Options**

- **Cathode Modulator**
- **Grid Modulated**
- **Linearizer**
- **Liquid / Conduction cooled**

### **Guaranteed Reliability**

- **Military proven high viscosity coatings for dust and humidity control.**
- **Critical component designs have accumulated more than 1 million hours of operation.**
- **Data logging and analysis for cost effective maintenance.**

The POL800W Klystron amplifier is specifically designed to meet multicarrier operation in demanding outdoor ground mobile communication applications. Polarity offers models suited for all major communication bands.

Outstanding thermal design ensures reliable operation to ambient temperatures of +60deg C. The POL800W offers a design with industry leading reliability and its power supply design ensures rugged performance that is unmatched.

High efficiency modern user multi-collector designs meets the demands of today's complex systems and offers the ability to effectively power manage the overall network as well as the increasingly challenging requirements for mobile systems.

A rich control protocol provides serial RS232/422/485, ethernet, and advanced user friendly communication to provide data logging for cost effective maintenance.

**POL800W — Industry Leading Performance — Affordable — Proven Reliability**

## Performance Specifications :

### Electrical

Frequency	95GHz (+/- 200Mz) Klystron model - VKB2466	
Output Power	800W (59 dBm) peak 700W (min)	
HPA Flange		
Duty	25%	
Rep rate	20KHz	
Gain	50dB (min)	
Input VSWR	1.3:1 max	
Output VSWR	1.3:1 max	
Line Input	200-240VAC, 1 phase +/- 10% 47-63Hz	
Input Power	5000W max	
Power Factor	0.95 (min)	1dB max

### Environmental

Operating Temperature	-40 deg C to +60deg C
Non-Operating	-40 deg C o +50 deg C, direct sunlight 50 deg C to +75 deg C
Relative Humidity	100% condensing
Altitude	
Operating	10,000 ft with 2 deg C/ 1000ft derating above sea level
Non-Operating	50,000 ft
Shock Vibration	20 g peak , 11 msec , ½ sine 2.1 grms , 5Hz to 500Hz
Acoustic Noise	65 dBA , 3 ft from amplifier
Thermal	Liquid cooling

### Mechanical

RF Input	WR-10
RF Output	WR-10
RF Output Monitor	SMA, diode detection
Dimensions (W x H x L)	19" x 12" x 28"
Weight	65 lb
Mounting	19" Rack mount

### Interface

Remote	RS-232 /422/485 Ethernet
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