

**SATCOM**

MILITARY AMPLIFIER

HF 1000W



# AFRACAL 1K

HF - 1.6 MHz to 30 MHz

VERSATILE MILITARY COMMUNICATIONS

The **Afracal 1k** is a High Power Amplifier providing communication for strategic long distance missions.

The amplifier covers the 1.6-30 MHz HF band at a typical 1000W output.

Low-pass-filter switching is controlled by both the Radio and Afracal logic to ensure seamless performance.



## MAIN FEATURES

### RF POWER AMPLIFIER 1000W

- 1.6-30MHz
- 1000W PEP
- LINEAR HF
- Extremely Compact and Reliable
- Radio user interface RS232 control
- Automatic output filter select
- Liquid Cooled
- Silent operation
- Forward power indication
- Reflected power indication
- 3 year warranty
- MIL-STD-810 G

## FEATURES FOR ANY MISSION

### COMPACT DESIGN

The **Afracal 1k** is the most compact 1 kW HF amplifier on the market, occupying only 3U in a 19" rack configuration.

### SET-UP

Set-up is automatically controlled by the connected radio.

### DATA

High data rates can be maintained due to the exceptional linearity.

### POWER SUPPLY

The **Afracal 1k** amplifier can operate on 110 - 220VAC or can be provided in a 48V DC version with external power supply. The connected radio is supplied with a stable 12VDC simplifying power supply configurations and reducing cabling.

### COOLING

Continuous operation even in the most demanding environments is ensured by liquid cooling. The overall size is reduced due to the superior cooling resulting in a market leading size of only 3U. This is ideal for compact base and naval systems.

### ATU

The **Afracal 1k** - RF Amplifier facilitates a connection to external high power antenna tuners converting radio RS232 to robust RS485 control signals for extended installation distances between the amplifier and the tuner.

### INSTALLATION

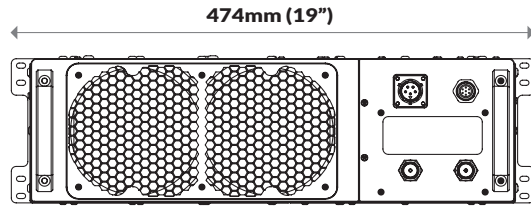
The amplifier is designed to be mounted in a 19" Rack but is also available as a table top version. Purpose built base station and vehicular mount racks are available.

Contact our sales team for options or custom solutions.

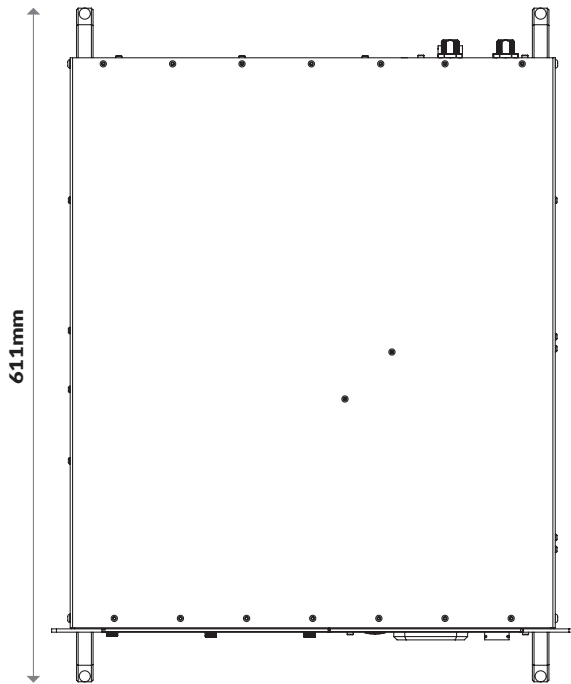
## ENVIRONMENTAL

- |                              |              |
|------------------------------|--------------|
| Shock, Vibration & Immersion | MIL-STD-810G |
| EMI/RFI                      | MIL-STD-461E |
| Operating Temperature        | -30 to +65°C |
| Storage Temperature          | -40 to +85°C |

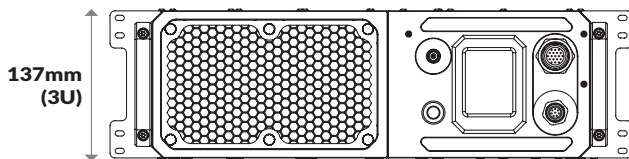
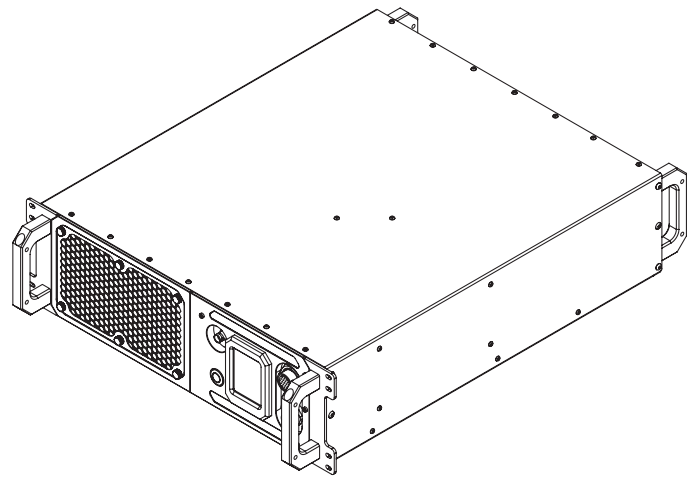
## AFRACAL 1k DIMENSIONS



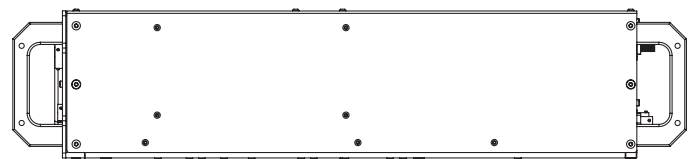
REAR VIEW



TOP VIEW



FRONT VIEW



SIDE VIEW

## SPECIFICATIONS

RF Output Power	1000W PEP	Power Connector	62IN-12E-14-5P	Tuner Interface	RS 232 / RS 485
Operation Cycle	Continuous	RF Input connector	BNC - Female	Data Connector	62IN-5005-10-8S
Gain Amp	13dB $\pm$ 1dB	RF Input/Output	50 Ohm	Dimensions	474x137mm x611 (w x h x d)
Harmonic Suppression	>55dB (typical)	RF Output connectors	N-Type Female, 2x	Weight	25 kg (typical)
Max Load Mismatch	VSWR 1: 5	Intercom Interface	Via radio handset connector	Power Consumption	220VAC 20A 110VAC 41A
Protection	Temperature, VSWR.	Aux Connector	62IN-5024-14-19S		
Power Source	110 - 220V AC	Tuner Connector	62IN-5005-10-7S		

Please verify specifications with our sales department.



**SATCOM**  
SECURE AND TACTICAL COMMUNICATIONS  
[www.sat.com.na](http://www.sat.com.na)

Tel: +264-61-374700  
Email: [sales@sat.com.na](mailto:sales@sat.com.na)  
2 Jakaranda Street  
Suiderhof  
Windhoek, Namibia