



MILITARY AMPLIFIER

VHF 75W

UHF 50W

HF 125W



Afracal 1

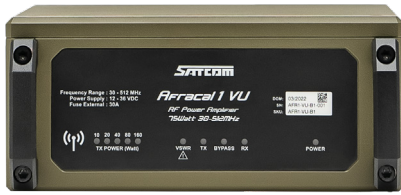
H - 1.6MHz to 30MHz

VU - 30MHz to 512MHz

VERSATILE MILITARY COMMUNICATIONS

Afracal 1

VU - 30MHz to 512 MHz H - 1.6 MHz to 30 MHz



MAIN FEATURES

LINEAR POWER AMPLIFIERS

- **Afracal 1 - H** 1.6 - 30 MHz (125W)
- **Afracal 1 - VU** 30 -512 MHz (75W)
- Rugged, Compact and Reliable
- Radio user interface RS232 / RS485 control
- Automatic output filter select
- Forward power indication
- Reflected Power indication
- 1 m water immersion
- 3 year warranty
- MIL-STD-810 G

FEATURES

The **Afracal 1** Power Amplifiers provide uncompromised communication for tactical missions.

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

COMPACT DESIGN

Designed to fit into tight spaces within military vehicles, the Afracal 1 amplifier range is one of the most compact available.

MIL-STD-810G

Powder-coated T6-Aluminium casing ensures compliance to MIL-STD- 810G specifications.

SET-UP

Set-up is automatically performed by the connected radio.

DATA

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

POWER SUPPLY

The **Afracal 1** amplifiers can operate from 12 - 36VDC. The connected radio is supplied with a stable 12VDC simplifying power supply configurations and reducing cabling.

ATU

The **Afracal 1 - H** 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

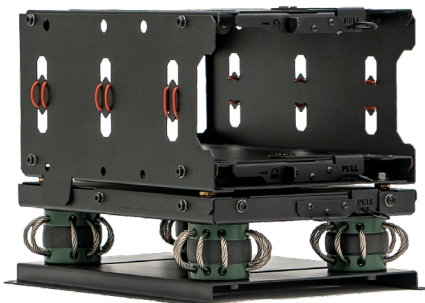
Purpose built base station and vehicular mount racks are available to facilitate quick extraction, cooling and vibration damping.

Contact our sale team for options or custom solutions.

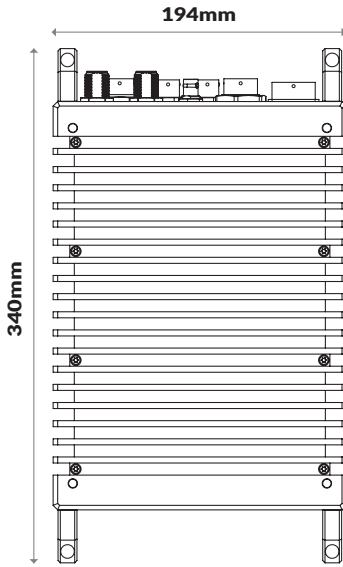
ENVIRONMENTAL

Shock, Vibration & Immersion
EMI/RFI
Operating Temperature
Storage Temperature

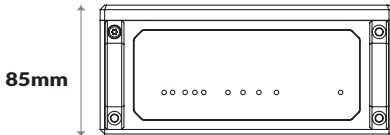
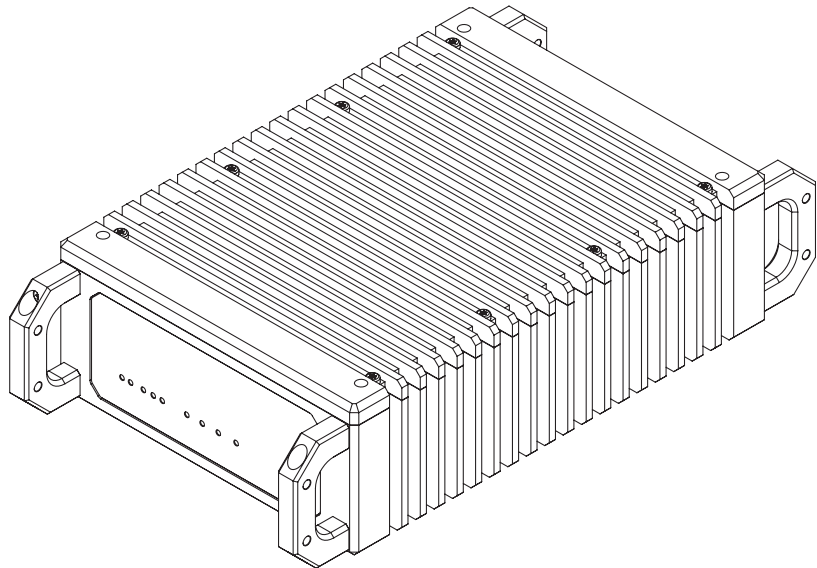
MIL-STD-810G
MIL-STD-461E
-30 to +65°C
-40 to +85°C



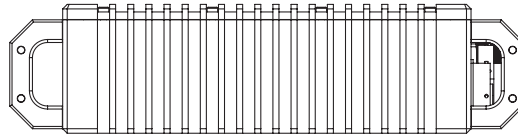
AFRACAL 1 POWER AMPLIFIER DIMENSIONS



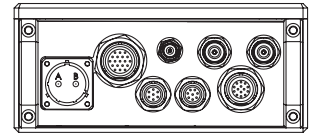
TOP VIEW



FRONT VIEW



SIDE VIEW



REAR VIEW

SPECIFICATIONS

RF Output Power	125W (1.6-30MHz) PEP 75W (30 - 512) CW	Protection	Temperature, VSWR.
Operation Cycle	Continuous with optional cooling fan.	Intercom Interface	Via radio handset connector
Gain Amp	13dB ±1dB	External Audio	10W into 4Ω Optional Speaker (Aux Connector)
Harmonic Suppression	>55dB (typical)	Aux Connector	62IN-5024-12-14S
Max Load Mismatch	VSWR 1: 5	Data Connectors	62IN-5005-10-8S
Power Source	12Vdc nom. (12-36 VDC)	Tuner Interface	RS232 / RS 485
Power Connector	62IN-12E-18-02P	Cooling Fan Connector	62IN-5005-10-6S
RF Input connector	BNC - Female	Tuner Connector	62IN-5005-10-7S
RF Input/Output	50 Ohm unbalanced	Dimensions	194x85mm x340 (w x h x d)
RF Output connectors	N-Type Female	Weight	8 kg (typical)
		Power Consumption	18A at 24V (typical)

Please verify specifications with our sales department.



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