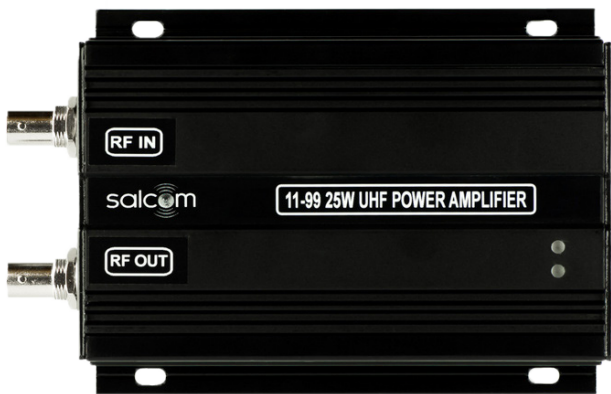


## Product Sheet

# Power Amplifier - UHF

## 11-99 Series

Aimed at increasing the range and distance of both paging and telemetry networks, the 11-99 UHF power amplifiers offer up to 25-Watt output from an input of only 3-Watts on a pre-tuned frequency and a minimum output of 20-Watts over the full switching bandwidth without retuning.



Product code and Options

11-99-1000    11-99-2000

### Key Features

- » Operates over range from 400-440MHz (11-99-1000) and 450-500MHz (11-99-2000)
- » With 4-5 watts input it will deliver 25 Watts.
- » Ability to switch bandwidth without retuning.
- » Will pass a receive signal with less than 2dB attenuation.
- » The 3 stage aerial filter attenuates all spurious emissions to less than -30dBm.
- » Receive mode can be disabled to utilise lower drive power.
- » Protected against accidental power connection reversal.

### Operation

Aimed at increasing the range and distance of both paging and telemetry networks, the 11-99 UHF power amplifiers offer up to 25-Watt output from an input of only 3-Watts on a pre-tuned frequency and a minimum output of 20-Watts over the full switching bandwidth without retuning.

The power sense operates with a minimum of 1 watt input and switches both the power and aerial relays thus minimising current consumption when in receive mode. The 11-99 will operate satisfactorily with an input drive of 1W which will give approximately 10-Watts out.

A 2dB, 50Ω input matching pad in the amplifier allows for connection to a wide range of driving devices without the risk of instability. In receive mode, the 11-99 will pass a receive signal with less than 2dB attenuation.

A 3-stage output filter attenuates spurious emissions to less than -30dBm and is in-circuit when in the receive mode to reduce receiver interference from high-band UHF services.

## Technical Specification

### Power Amplifier - UHF - 11-99-2000 - 25-Watt

Frequency Range	400-440MHz - UHF (Model No. 11-99-1000) 450-500MHz - UHF (Model No. 11-99-2000)
Frequency Selection	Factory preset
Power Supply	+13.8V typical (11 to 15 VDC range)
Power Consumption	Standby: 4mA Normal Operation: 4.5A Maximum: 6A @ 25W output
Transmit Power	25W @ 4W input; 18W @ 2W Input; 10W @ 1W Input approx.
Transmit Duty Cycle	50% at 25 Watts; Maximum 1 minute on time
Switching Bandwidth	50MHz, 20 Watts minimum with 4 Watts input
Transmit Enable	Power sense circuit operates relay (1W min)
Receive Mode	50MHz, 20 Watts minimum with 4 Watts input
Power Connector	2-way pluggable terminal block (supplied)
RF Connector	50Ω BNC (both Input and Output)
Environmental Protection	Not suitable for outdoor use and should be protected from adverse environmental conditions
Operating Temperature	-10°C to +60°C (+14°F to +140°F)
Indicators	Power LED (Green) <ul style="list-style-type: none"><li>• Solid On = Normal Operation</li></ul> Status LED (Red) <ul style="list-style-type: none"><li>• Off = Receive mode</li><li>• On = Transmit mode</li></ul>
Weight	400g
Enclosure Dimensions	100mm x 130mm x 30mm (W x D x H)
Enclosure Material	Extruded aluminium
Colour	Matte Black
Type Approvals	AS 4295: 1995 (RF) FCC CFR47 Part 90 (RF), Part 2 (RF)

NB: All specifications and applications are indicative only and subject to change without prior notification.