





OEM MICROWAVE POWER AMPLIFIERS

LEanamp-1600m-10-m

OEM 1570-1620MHz 10W Amplifier

LEANAMP-1600M-10-M is a compact **OEM Amplifier** Module conceived for demanding applications requiring state-of-the-art technology, absolute signal purity, high energy efficiency and long-term reliability.

LEANAMP-1600M-10-M is a class-AB OEM Power Amplifier developed for easy integration into devices operating in the microwave range **from 1570MHz to 1620MHz** to produce an output power of 10W @1dBc with a 40dB gain and dual 28Vdc and 5Vdc power supply. The module is equipped with a simple analogue user interface for easy monitoring and control.

The Power Amplifier, based on LDMOS technology, is designed for CW and pulsed applications and includes an isolator at the output in order to protect the internal hardware from temporary high VSWR operating conditions. The OEM module shall be mounted on a heatsink for forced-air cooling by means of a suitable fan, please contact the factory in order to get information about the recommended heatsink and fan depending on the intended operating ambient temperature.

LEANAMP-1600M-10-M can be used for applications telecommunications in laboratory environment for experimentation, for measurement or calibration purposes. Top accuracy is guaranteed by latest-generation power devices, by real-time measurement of Temperature, Forward Power and Reflected Power and long-term reliability is ensured by accurate components selection and careful thermal balance considerations from the beginning of the design phase.

QUICK OVERVIEW

Ready for quick integration

Dual 28Vdc and 5Vdc power supply

High energy efficiency

Conceived for forced-air cooling

LDMOS technology

10W @1dBc

40dB gain

Integrated output isolator

Analogue user interface

Real-time measurement of Temperature, Forward and Reflected Powers

Ready for continuous and pulsed modes

Top accuracy and long-term reliability



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Technical Specifications

Frequency Range

Output Power @1dBc

Max Output Power

Nominal Input Power

Max Input Power

Small-signal Gain

Power Gain

Output Power in OFF Mode

Input Return Loss

Output Return Loss

Power Supply 1 Voltage Range

Max Power Supply 1 Voltage

Power Supply 2 Voltage Range

Power Supply 1 Current

Power Supply 2 Current

Efficiency (Vdc=28V, in=0dBm)

Input/Output Impedance/Connector

Dimensions

Control Connector

1570-1620MHz

>10W

>11W

0dBm

+10dBm

44dB ±1dB

40.5dB ±0.5dB

<10dBm @0dBm input

>20dB

>25dB

5÷30Vdc (nominal 28Vdc)

32Vdc

5Vdc ±5%

1A @0dBm input

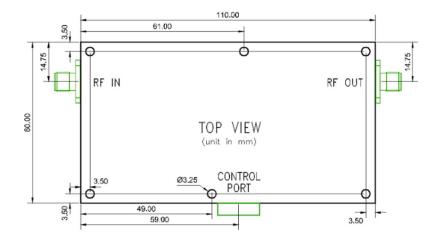
350mA @0dBm input

>50%

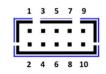
50Ω/SMA-f

110x60x17mm

HIROSE DF11-10DP-2DS (male10 pin)



CONTROL PORT



- GND
- GND TEMPERATURE CURRENT
- REF POWER
- **FWD POWER**
- ON/OFF
- +28Vdc **10** +28Vdc

READINGS & CONTROL

FORWARD POWER 0-5V REFLECTED POWER TEMPERATURE 10mV/°C +28V SUPPLY CURRENT 2.5V +0.5V/A

ON FLOATING - OFF GND



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