

MKU PA 23CM-250W CU, Power Amplifier

1270 ... 1300 MHz • 250 W

High Power Amplifier for the Amateur Radio Band 23 cm

This linear high power amplifier was developed for producing high frequency energy for accelerators applications.

High power, high efficiency and best linearity are achieved by our high power amplifier for the 23 cm amateur radio band. Compared to tube power amplifiers the used LDMOS transistor operates with a supply voltage of only +50 V DC. High voltage transformers, waiting for tube warm-up and retuning of the tube are the past! The power amplifier can be mounted close to the antenna to avoid power losses caused by long coaxial cable.



Features

- Milled copper case to provide optimum heat transfer
- 50 V LD MOSFET technology
- High linearity
- High efficiency (up to 50 %)
- Reverse polarity protection
- Monitor output for forward power detection (DC voltage)
- ON / OFF control with DC voltage

Applications

- Research: High Power Amplifier for accelerators
- Analog and digital (COFDM) transmission systems
- Amateur Radio operations (EME, contest)

Important notes

Please notice the following:

- The technical specifications refer to room temperature.
- The power amplifier doesn't contain any coaxial relays.
- The recommended combination of heat sink and fan(s) is only specified for an ambient temperature of 25 °C.
- Further information about dimensioning of heat sinks is available on our FAQ site.

Industrial use

Our power amplifiers of the MKU-series are exclusively intended for amateur radio applications and will only be sold to radio amateurs with a licence. These products are specified for amateur radio requirements and are not designed for industrial applications. Please notice our list of industrial products or ask for a special version.

Technical specifications:

Frequency range	1270..1300 MHz
Input power	4 ... 6 W
Maximum input power	6 W
Saturation power	typ. 300 W
Gain (small signal)	min. 17 dB
Harmonic rejection	min. 35 W @ 250 W
ON voltage	+9 ... 14 V DC
Supply voltage	+50 V DC

Quiescent current	typ. 0.25 A
Current consumption	max. 12 A @ 300 W
Operating case temp. range	-20 ... +65 °C
VSWR of load	max. 1.8 : 1
Input connector / impedance	SMA-female / 50 ohms
Output connector / impedance	N-female / 50 Ohms
Case	milled copper, silver-plated
Dimensions (mm)	130 x 60 x 20
Weight	730 g (typ.)