KUHNE electronic

Power Amplifiers

MKU PA 23CM-1200W A, Power Amplifier

1280 ... 1300 MHz

1200 W

High power linear amplifier for the 23 cm amateur radio band

Our high-performance amplifier for the 23 cm amateur radio band achieves great performance, high efficiency and best linearity. In contrast to tube amplifiers, an LDMOS transistor with a supply voltage of only +50 V is used here. High-voltage transformers, preheating and annoying post-voices are a thing of the past! The amplifier can be mounted close to the antenna to avoid power losses due to long coaxial cables.

Included supply:

Cable lugs for the power supply



Features

- Construction in milled aluminum and copper housing to ensure optimal heat transfer
- 50V LD MOSFET technology
- High linearity
- High efficiency (up to 45%)
- Detector output to monitor forward and reverse power (DC voltage)Switch on / off with DC voltage
- Over-temperature shutdown

Applications

- Research: high power amplifiers for accelerators
- COFDM systems with modulation types QPSK, QAM
- Analog transmission systems
- Ham Radio: EME Contest

Important notes

- Specification refers to room temperature.
- The amplifier module does not contain any coaxial relays!
- The heat sink/fan combination or water cooling is only dimensioned for an ambient temperature of 25 $^{\circ}\text{C}.$
- For more information on heatsink sizing, see our FAQ page.

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	12801300 MHz	
Input power	typ. 20 - 30 W	
Output power (CW)	1200 W (CW) peak power	
Gain (small signal)	typ. 17 dB	
Harmonic rejection	typ. 37 dB @ 1000 W	
Over temperature protection	at 75 Degree	
Supply voltage	+50 V DC	



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Quiescent current	typ. 4 A
Current consumption	max. 57 A
VSWR of load	max. 1.8 : 1
Input connector / impedance	SMA-female / 50 ohms
Output connector / impedance	7/16-female, 50 ohms
Case	aluminum and copper (nickel plated)
Dimensions (mm)	223 x 156 x 43
Weight	5200 g (typ.)