

High perf. heat conductive paste

KUHNE electronic

As an enhancement of the Arctic Silver 3 the new heat-conductive paste Arctic Silver 5 features a heat conductance of 9.0 W/mK and better. Ranking first on the market of high performance heat-conductive pastes this product is intended to be used together with cooling actions of high-power amplifiers. The aim is to extend lifetime and to achieve better efficiency by operating amplifiers and transistors with lower temperatures. The applicable temperature range is - 50 ... + 130 °C.

Due to optimum consistency the application is easy to handle.



Technical specifications

Amount: 3.5 g

Thermal resistance: 0.0127 °C - cm²/W Heat conductance: 9.0 W/mK and better

- contains 99,9% silver
- contains silver-, aluminium and zinc oxide
- Depending on the used heatsink and the operating behaviour of the system the run-in period can extend up to 200 hours!



MP 5030, Mounting plate for power amplifier

This mounting plate allows power amplifiers having the mounting holes on the bottom side to be easiely mounted on a heat sink.



Technical specifications

Material: aluminium

Dimensions: 50 x 46 x 2 mm, drilled

4 pieces suitable screws for mounting the amplifier are included.

Important notes



MP 7045, Mounting plate for power amplifier

This mounting plate allows power amplifiers having the mounting holes on the bottom side to be easiely mounted on a heat sink.



Technical specifications

Material: aluminium

Dimensions: 70 x 61 x 3 mm holes for PA fixing are only marked

4 pieces suitable screws for mounting the amplifier are included.

Important notes



MP 7330, Mounting plate for power amplifier

This mounting plate allows power amplifiers having the mounting holes on the bottom side to be easiely mounted on a heat sink.



Technical specifications

Material: aluminium

Dimensions: 73 x 46 x 2 mm, drilled

4 pieces suitable screws for mounting the amplifier are included.

Important notes



MP 7630, Mounting plate for power amplifier

This mounting plate allows power amplifiers having the mounting holes on the bottom side to be easiely mounted on a heat sink.



Technical specifications

Material: aluminium

Dimensions: 76 x 46 x 3 mm holes for PA fixing are only marked

4 pieces suitable screws for mounting the amplifier are included.

Important notes



TS-65/10 - Thermal cut-out thermostat

Terminals 6.2 x 0.8 mm; Housing thermosetting plastic 12 mm; Moving bracket small; cap aluminum



Technical specifications

Version: normally closed Rated current @ 250 V AC: 10 A Temperature (Ta): 65 °C

Tolerance: +/- 3 °C Contact resistance:

Applications

With this thermal cut-out thermostat it is possible to protect power amplifiers against damages caused by overheating. The hysteresis allows the amplifier to cool down and prevents switching on / off in short time intervals.

The thermal cut-out thermostat can be implemented in the line voltage or in the supply voltage of the amplifier optionally.



WP 472 B - Mechanical changeover plate

for mm-wave amplifier MKU LNA 472 B

By means of this mechanical changeover plate it is possible to use one amplifier for transmitting and receiving on 47 GHz. This item allows to turn the amplifier so that it can be used for the transmitting and receiving path alternatively.



Technical specifications

Material: brass (galvanically silver-coated)
Screw: M2 for flanges and mountings

Dimensions: $50 \times 30 \times 4.9 \text{ mm}$ (waveguide: R500 / WR19 / WG24) Two spring plungers with ball and slot and one central fixing screw are included.

Features

- Built-in choke flanges to prevent couplings and oscillations



WP 473 A - Mechanical changeover plate

for mm-wave amplifier MKU LNA 473 A

By means of this mechanical changeover plate it is possible to use one amplifier for transmitting and receiving on 47 GHz. This item allows to turn the amplifier so that it can be used for the transmitting and receiving path alternatively.



Technical specifications

Material: brass (galvanically silver-coated)
Screw: M2 for flanges and mountings
Dimensions: 56 x 30 x 4.9 mm (waveguide: R500 / WR19 / WG24)
Two spring plungers with ball and slot and one central fixing screw are

included. Features

- Built-in choke flanges to prevent couplings and oscillations



MP 8055, Mounting plate for power amplifier

This mounting plate allows power amplifiers having the mounting holes on the bottom side to be easiely mounted on a heat sink.



Technical specifications

Material: aluminium

Dimensions: 80 x 71 x 3 mm holes for PA fixing are only marked

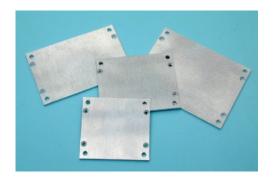
4 pieces suitable screws for mounting the amplifier are included.

Important notes



MP 7640, Mounting plate for power amplifier

This mounting plate allows power amplifiers having the mounting holes on the bottom side to be easiely mounted on a heat sink.



Technical specifications

Material: aluminium

Dimensions: 76 x 56 x 2 mm, drilled

4 pieces suitable screws for mounting the amplifier are included.

Important notes



MP 6030, Mounting plate for power amplifier

This mounting plate allows power amplifiers having the mounting holes on the bottom side to be easiely mounted on a heat sink.



Technical specifications

Material: aluminium

Dimensions: 60 x 46 x 2 mm, drilled

4 pieces suitable screws for mounting the amplifier are included.

Important notes



Waterproof case for outdoor installation

Waterproof case for outdoor installation

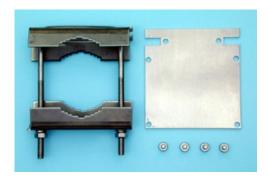


Technical specifications

Dimensions inside (mm): 90 x 60 x 40 incl. V2A mounting clamp



Mounting clamp for tower mounting



Technical specifications

Material: Aluminium and V2A Aperture of the antenna mast 25 ... 60 mm



WP 761 B - Mechanical changeover plate

for mm-wave amplifier MKU LNA 761 B

By means of this mechanical changeover plate it is possible to use one amplifier for transmitting and receiving on 76 GHz. This item allows to turn the amplifier so that it can be used for the transmitting and receiving path alternatively.



Technical specifications

Material: brass (galvanically silver-coated)
Screw: M2 for flanges and mountings
Dimensions: 50 x 30 x 4.9 mm (waveguide: R740 / WR12 / WG26)
Two spring plungers with ball and slot and one central fixing screw are

included. Features

- Built-in choke flanges to prevent couplings and oscillations



30cm - 24 GHz Waveguide. WR42 / R220 / WG20



Description

Material: copper base alloy, shorted to the customized length (max. 1 m)

Dimensions outside: (B x H) 12,7 x 6,4 mm Dimensions inside: (B x H) 10,7 x 4,3 mm

Weight:approx. 304 g/m

Frequency range: 18 - 26.5 GHz





KU LO 20 RACK

Oscillator in rackmount case



Technical specifications:	
Output frequency	20200 MHz
Output power	typ. 1 mW
Crystal frequency	105.21 MHz
Output / Impedance	SMA-female / 50 ohms
Dimensions (mm)	



47 GHz Flange UG-387/U (Modified)

47 GHz Waveguide Flanges



Technical specifications

UG-387/U (Modified)

Waveguide flange for R500 / WR19 / WG24 waveguide

Material: brass

Find a detailed description under downloads / dimensions.



76 GHz Flange UG-387/U (Modified)

76 GHz Waveguide Flanges



Technical specifications

UG-387/U (Modified)

Waveguide flange for R740 / WR12 / WG26 waveguide

Material: brass

Find a detailed description under downloads / dimensions.



24 GHz Flange for R220 / WR42

24 GHz Waveguide Flanges



Technical specifications

Waveguide flange for R220 / WR42 waveguide

Material: brass

Find a detailed description under downloads / dimensions.



30cm - 47 GHz waveguide R500 / WR19 / WG24



Description

Material: copper base alloy, shorted to the customized length (max. $60\,$

cm)

Dimensions outside: (B x H) $6.80 \times 4.40 \text{ mm}$ Dimensions inside: (B x H) $4.77 \times 2.38 \text{ mm}$

Weight:approx. 150 g/m

Frequency range: 40 - 60 GHz



30cm - 76 GHz waveguide R740 / WR12 / WG26



Description

Material: copper base alloy, shorted to the customized length (max. 1 m)

Dimensions outside: (B x H) $5.12 \times 3.57 \text{ mm}$ Dimensions inside: (B x H) $3.09 \times 1.54 \text{ mm}$

Weight:approx. 106 g/m

Frequency range: 60 - 90 GHz



MKU LO 8-13 PLL-2, Oscillator

54 ... 13600 MHz

- Frequency freely configurable
- Remote control
- Intuitive operation
- High Resolution
- Synchronisable also with other modules
- 1 Hz accurate setting

The oscillator unit MKU LO 8-13 PLL was designed as a universal local oscillator source and covers the frequency range from 8.4 GHz to 13.6 GHz. The oscillator can be operated as well in the frequency range between 54 MHz and 6.85 GHz, allowing the use in manifold applications. The user can choose frequencies from a standard frequency list or programm it's own output frequency in the oscillator unit. The frequency resolution is 1 Hz. Absolute frequency accuracy and stability can be achieved by supplying an external 10 MHz reference frequency, which can be distributed via output REF OUT to additional modules. Control of MKU LO 8-13 PLL is via a serial interface, e.g. using a terminal program and a respective TTL-USB serial converter. Firmware updates are managed via serial interface. MKU LO 8-13 PLL can alos be operated in a stand-alone mode.



Features

- Frequency step size 1 Hz
- Temperature compensated crystal oscillator
- CW Keying
- 10 MHz referenz frequency input

Applications

Signal source for:

- Power generators
- CW-Generators
- Measurement and testing technology

Display

For easy configuration and control of the oscillator unit a 3.2" touchscreen display can be connected.

We provide a suitable software for this display under the downloads tab.

Recommended displays

Recommended displays overview

Technical specifications:	
Output frequency	8400 13600 MHz
Output frequency 2	54 6850 MHz
Output power	typ. 20 mW
Frequency accuracy @ 18°C	+/- 1 ppm
Frequency stability @ 0 40 °	+/- 1 ppm
CW keying (telegraphy)	A1
CW input connector	PIN / Pinheader
Phase noise @ 100 Hz	typ67 dBc/Hz
Phase noise @ 1 kHz	typ88 dBc/Hz
Phase noise @ 10 kHz	typ89 dBc/Hz
Phase noise @ 100 kHz	typ 99 dBc/Hz
Phase noise @ 1 MHz	typ124 dBc/Hz



External reference frequency	10 MHz / 2 10 mW (sine or sqare wave)
Maximum case temperature	+55 °C
Supply voltage	+12 14 V DC
Current consumption	typ. 300 mA
Input (external oscillator)	SMA-female / 50 ohms
Output / Impedance	SMA-female / 50 ohms
Case	milled aluminium
Dimensions (mm)	100 x 60 x 13
Weight	140 g