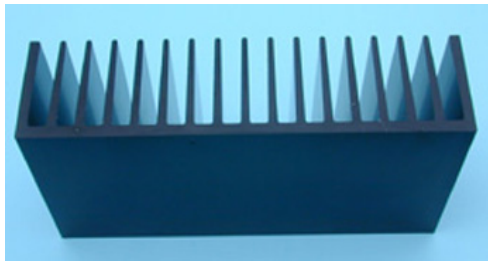


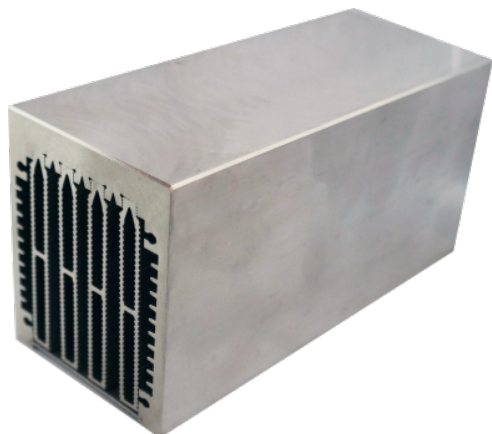
### SK 120 - 75 heat sink



#### Technical specifications:

K / W	1.25
Material	Aluminium, black anodized
Dimensions (mm)	150 x 75 x 40
Weight	470 g (typ.)

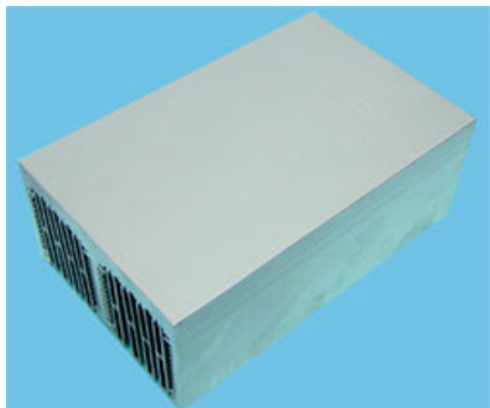
### SK 150 - 62 heat sink



#### Technical specifications:

K / W	0.21 at 5 m/s
Material	aluminium blank, flat milled base
Dimensions (mm)	150 x 62 x 75
Weight	800 g (typ.)
Suitable Fansize (mm)	60 x 60

**SK 200 - 125 High-performance-heat sink**



**Technical specifications:**

K / W	0.09 at 5 m/s
Material	aluminium blank, flat milled base
Dimensions (mm)	200 x 125 x 75
Weight	2200 g (typ.)
Suitable Fansize (mm)	60 x 60

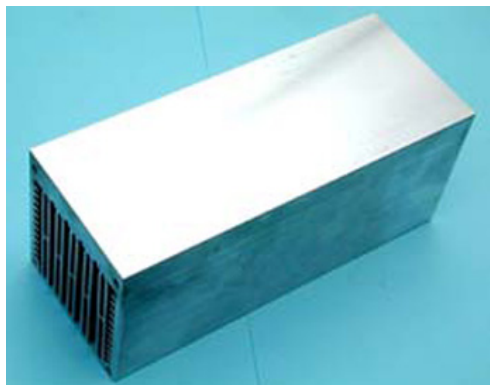
SK 200 - 160 High-performance-heat sink



Technical specifications:

K / W	0.065 at 5 m/s
Material	aluminium blank, flat milled base
Dimensions (mm)	200 x 160 x 85
Weight	3500 g (typ.)
Suitable Fansize (mm)	80 x 80

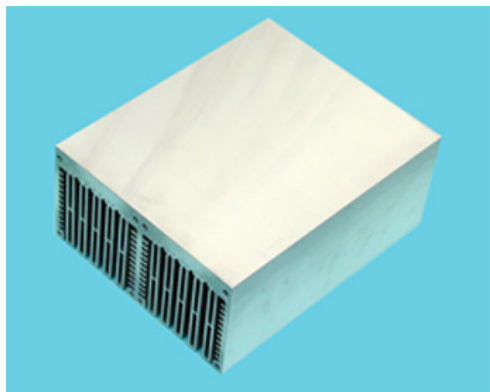
### SK 200 - 80 High-performance-heat sink



#### Technical specifications:

K / W	0.13 at 5 m/s
Material	aluminium blank, flat milled base
Dimensions (mm)	200 x 80 x 85
Weight	1700 g (typ.)
Suitable Fansize (mm)	80 x 80

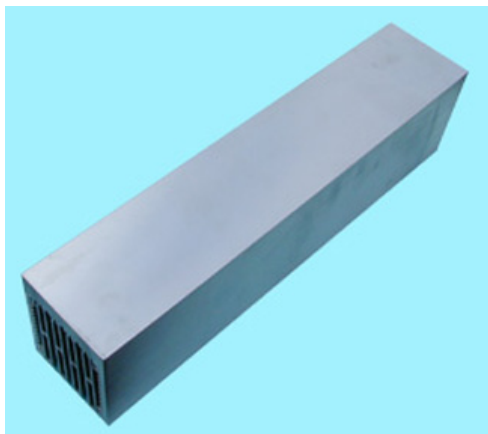
SK 300 - 240 - 120 High-performance-heat sink



Technical specifications:

K / W	0,026 at 5 m/s
Material	aluminium blank, flat milled base
Dimensions (mm)	300 X 240 X 120
Weight	10500 g (typ.)
Suitable Fansize (mm)	120 X 120

SK 300 - 62 High-performance-heat sink



Technical specifications:

K / W	0.15 at 5 m/s
Material	aluminium blank, flat milled base
Dimensions (mm)	300 x 62 x 75
Weight	1600 g (typ.)
Suitable Fansize (mm)	60 x 60

### WK 15 -12 Liquid cold plate

Liquid cold plate for different cooling liquids



#### Technical specifications:

Material	Mounting plate: milled aluminium, Tube: copper
Cooling Fluid	H2O, Glycol/H2O, de-ionized water, oil, POA ...
Dimensions (mm)	152 x 127 x 15.2
CU Tube outer / inner diameter	9.5 mm / 7.0 mm
Weight	900 g (typ.)



### MKU UP 2424 B, Oscar Phase 4 Up-Converter

2400 ... 2402 MHz

Stand-alone up converter for the OSCAR PHASE 4 geostationary satellite

144 MHz IF

Fully remote controllable

Firmware update is available in the "Download" tab below! New features:

- includes additional module for optimized frequency generation
- synchronization by external 10 MHz-reference signal ( SMA-connector )
- enhanced frequency stability (+/- 0.5 ppm between 0°C and 60°C )
- various IF-frequencies in 2m- and 70cm ham radio bands



#### Features

- Integrated TCXO
- LDMOS power amplifier with low pass filter for good harmonic suppression
- Power indicator on the front panel
- Protection against bad VSWR and over temperature

NEW features: - includes additional module for optimized frequency generation

- synchronization by external 10 MHz-reference signal ( SMA-connector )
- enhanced frequency stability (+/- 0.5 ppm between 0°C and 60°C )
- various IF-frequencies in 2m- and 70cm ham radio bands

#### Applications

- Up-Converter for the geostationary satellite OSCAR PHASE 4
- For DATV usable

#### Technical specifications:

Frequency range (IF)	144 ... 146 MHz / 432 ... 434 MHz
Input power (IF)	0.5 ... 5 W (adjustable)
Frequency range (RF)	2400 ... 2402 MHz
LO frequency	1968 MHz / 2256 MHz
LO accuracy @ 18 °C	typ. +/- 1.5 ppm
LO frequency stability	typ. +/- 0.5 ppm (0°C ... 60°C)
Output power (Psat)	min. 20 W
Harmonic rejection	min. 60 dB
Supply voltage	+13.8 V DC (+12 ... 14 V DC)
Connector supply voltage	SUB-D 9-pole
Current consumption	typ. 7 A (TX)
Reference frequency input	10 MHz / 2 ... 10 mW
Input connector / impedance	BNC-female / 50 ohms
Ref. input con. / impedance	SMA-female, 50 ohms
Output connector / impedance	N-female, 50 ohms
Dimensions (mm)	165 x 206 x 67
PTT control	Contact closure to ground or +12 V on the IF cable

### KU EDPU - 5.0 External Display Unit

Versatile in use   Intuitive to use   Plug & Play

Display suitable for

- MKU LO 8-13 PLL
- MKU LO 8-13 PLL-2
- MKU 76 G2 (together with MKU LO 8-13 PLL)
- MKU 10 G5
- MKU UP 2424 B

The 5-inch display unit from Kuhne electronic GmbH was developed to offer excellent picture quality and state-of-the-art functions in a robust housing. It is supported by many of our products.

Included supply

- Mini-DIN connection cable (1 meter)
- DC connection cable (2 meters)



#### Description

The 5-inch display unit from Kuhne electronic GmbH was developed to offer excellent picture quality and state-of-the-art functions in a robust housing. The display supports many of our products and thus makes configuration/operation easier. Connecting the products is quick and easy thanks to the fixed plug-in system. We offer appropriate adapters as accessories for connecting the products.

#### Features

- Easy handling
- Automatic device detection
- Updatable
- Mounting holes on the back

#### Technical specifications:

Screen Size (inch)	5 inch
Screen Resolution	800 x 400 pixel
Screen Type	IPS-touchscreen (capacitive)
Power Supply	10 ... 14 V
power consumption	150 mA
Operating Temperatur	-20 ... +70 °C
Dimension (mm)	165 x 95 x 23 mm
Weight	408 g

### KUDPA-RS232 - Display Adapter RS232

Connection adapter for MKU UP 2424 A/B to establish a connection with the External Display Unit 5.0.

quick configuration   monitoring   plug&play

Included supply:

RS232 extension cable



#### Description

Connection adapter for UP 2424 A/B to establish a connection with the External Display Unit 5.0. This allows the UP converter to be configured and monitored without the need for configuration.

#### Technical specifications:

Power Supply	10 ... 14 V
Dimension (mm)	84 x 42 x 24 mm
Weight	40 g

### WK 22-16 Water Heatsink

Liquid heat sink for water and other cooling liquids

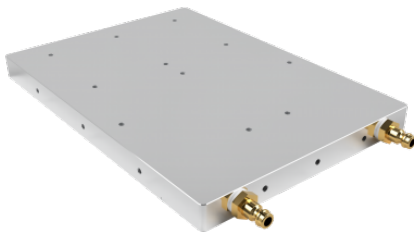
The highest possible cooling capacity in the smallest possible space

Suitable for MKU PA 23 CM 1200W A

Liquid heat sink for dissipating large amounts of heat with a small footprint. Is an effective system to cool power modules. It is suitable for water pH 6.5-8.5 with anti-corrosion agent and other fluids.

Included supply:

2x quick coupling suitable for the cooling plate



#### Description

Liquid heat sinks represent the top performance class of heat sink technology. They are extremely compact and cool particularly efficiently, as they generate significantly more heat dissipate in much less time than passive or fan-assisted heatsinks. Since they also have no moving parts, they are particularly low-maintenance.

#### Features

- Better heat dissipation than air heatsinks
- Suitable for narrow installation space
- The transfer of the cooling liquid to another location can be easily implemented
- Simple connection to existing cooling circuit possible
- Precisely plane-milled surface of the component mounting surface with very good evenness and low peak-to-valley height
- Plug & Cool

#### Technical specifications:

Material	aluminium blank, flat milled base
Cooling Fluid	H2O, Glycol/H2O, de-ionized water, oil, POA ...
Operation pressure	max. 2 bar
Flow rate	250 ... 1200 l/h
Water temperature	15 ... 25 °C
Dimensions (mm)	223 x 156 x 16
Connection	NW5-G-18-AG quick release
Weight	1150 g (typ.)

### WK 25-17 Liquid cold plate

Liquid heat sink for water and other cooling liquids  
the highest possible cooling capacity in the smallest possible space  
Suitable for KU SG 2.45-250 A

Liquid heat sink for dissipating large amounts of heat with a small footprint. Is an effective system to cool power modules. It is suitable for water pH 6.5-8.5 with anti-corrosion agent and other fluids.

Included supply:

2x quick coupling suitable for the cooling plate



#### Description

Liquid heat sinks represent the top performance class of heat sink technology. They are extremely compact and cool particularly efficiently, as they generate significantly more heat dissipate in much less time than passive or fan-assisted heatsinks. Since they also have no moving parts, they are particularly low-maintenance.

#### Features

- Better heat dissipation than air heatsinks
- Suitable for narrow installation space
- The transfer of the cooling liquid to another location can be easily implemented
- Simple connection to existing cooling circuit possible
- Precisely plane-milled surface of the component mounting surface with very good evenness and low peak-to-valley height
- Plug & Cooling

#### Technical specifications:

Material	aluminium blank, flat milled base
Cooling Fluid	H2O, Glycol/H2O, de-ionized water, oil, POA ...
Operation pressure	max. 2 bar
Flow rate	250 ... 1200 l/h
Water temperature	15 ... 25 °C
Dimensions (mm)	250 x 170 x 14
Connection	NW5-G-18-AG quick release
Weight	630 g (typ.)

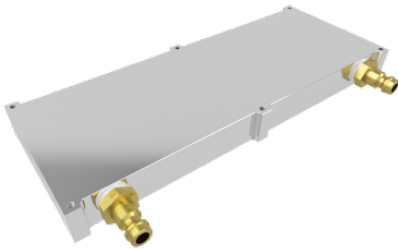
### WK 18-07 Water Heatsink

Liquid heat sink for dissipating large amounts of heat with a small footprint. Is an effective system to cool power modules. It is suitable for water pH 6.5-8.5 with anti-corrosion agent and other fluids.

- Liquid heat sink for water and other cooling liquids
- the highest possible cooling capacity in the smallest possible space
- Suitable for KU SG 2.45-450 A

#### Included supply:

- 2x quick coupling suitable for the cooling plate



#### Description

Liquid heat sinks represent the top performance class of heat sink technology. They are extremely compact and cool particularly efficiently, as they generate significantly more heat dissipate in much less time than passive or fan-assisted heatsinks. Since they also have no moving parts, they are particularly low-maintenance.

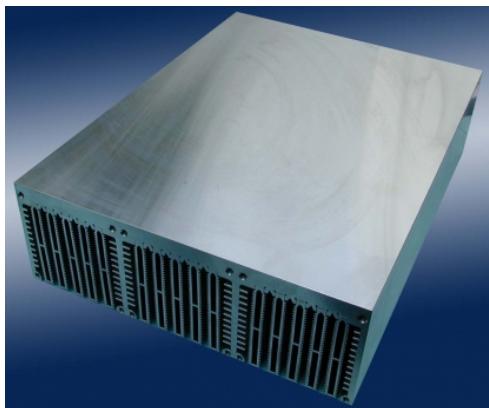
#### Features

- Better heat dissipation than air heatsinks Suitable for narrow installation space
- The transfer of the cooling liquid to another location can be easily implemented
- Simple connection to existing cooling circuit possible
- Precisely plane-milled surface of the component mounting surface with very good evenness and low peak-to-valley height
- Plug & Cooling

#### Technical specifications:

Material	aluminium blank, flat milled base
Cooling Fluid	H2O, Glycol/H2O, de-ionized water, oil, POA ...
Operation pressure	max. 4 bar
Flow rate	250 ... 1200 l/h
Water temperature	15 ... 25 °C
Dimensions (mm)	180 x 71 x 18
Connection	NW5-G-18-AG quick release
Weight	400 g (typ.)

SK-300-240, High-performance-heat sink



Technical specifications:

K / W	0.03 at 5 m/s
Material	aluminium blank, flat milled base
Dimensions (mm)	300 x 240 x 80 mm
Weight	8000 g (typ.)
Suitable Fansize (mm)	80 x 80

### KU HS LA10-150-KIT - Air Cooling

Heatsink with pre-assembled fan and a suitable fan controller.

When ordering a microwave KU SG2.45 - 250D or 25B generator, this is assembled immediately.

- lab supplies
- quick start-up
- Operational safety through fan control

Included supply:

DC cable for fan control with laboratory plug



#### Description

Heatsink with pre-assembled fan and a suitable fan controller.

When ordering a microwave KU SG2.45 - 250D or 25B generator, this is assembled immediately. Thus, a quick start-up is possible. Heat sink and fan are precisely matched to the generator.

#### Features

- Immediately ready for use (Plug&Play)
- operational safety
- Compact design

#### Technical specifications:

Dimensions (mm)	182 X 172 X 108 mm
Weight	3500 g (typ.)
Supply voltage	+24 V DC
Current consumption	typ. 0.4 A