

V1.0

KU PA 640720 - 10 A



Manual

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ALARIS
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Specification

Specifications (Ta = 25 °C):

Frequency range	6400 ... 7200 MHz
Input power For P3dB Maximum	typ. 3 dBm, max. 7 dBm +10 dBm
Output power P1dB COFDM 2)	typ. 40 dBm, min. 39 dBm (CW) typ. 30 ... 34.7 dBm
Gain Small signal Flatness (small signal)	typ. 39 dB, min. 36 dB typ. +/-2 dB
Noise Figure	typ. 5 dB
Harmonics Harmonic rejection @ 39 dBm	min. 35 dB
Intermodulation distortions IM3 @ 37 dBm PEP 1) IM3 @ 40 dBm PEP 1)	typ. 30 dBc typ. 20 dBc
Efficiency @ 45 dBm (CW) Input return loss (S11)	typ. 18 %, min. 13 % typ. 10 dB
ON voltage Current on ON pin Supply voltage	+5 ... 14 V DC typ. 2 mA +12 ...14 V DC
Quiescent current Current consumption @ P1dB	typ. 3.7 A max. 4.5 A
Monitor output Forward detection	yes (diode-detector)
Limits VSWR of load Operating case temperature range	max. 1.8:1 -20 ... +55 °C
Mechanics Input connector / impedance Output connector / impedance Case	SMA-female, 50 ohms SMA-female, 50 ohms milled aluminium, IP20
Dimensions (mm) Weight	130 x 59 x 20 typ. 270 g

Features:

- GaAs technology
- Reverse polarity protection
- High linearity (class A operation)
- Monitor output for forward power detection (DC voltage)

Applications:

- Measurement and laboratory equipment

Accessories:

- Recommended power supply: RSP 150 W 12
- Recommended heat sink: SK 150 - 62
- Recommended fan: FAN 80x80 24V

Amplifier should be mounted on heat sink!

- 1) Two tone test; $\Delta f=1\text{MHz}$
- 2) Single carrier, 64 QAM; 8 Msps; EVM = 2%

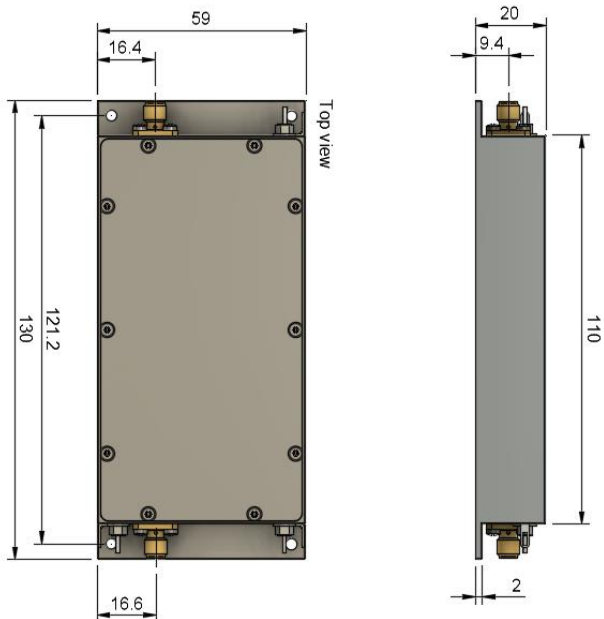
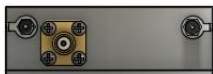
CE Konformität / CE Conformity

EMC directive 2014/30/EU
 Low voltage directive 2014/35/EU
 RoHS directive 2011/65/EU



Dimensions / Mounting holes

(mm)



Important Note on the Warranty

The amplifier does not contain an active protection circuit. It has to be installed and run by qualified technical personnel or radio amateurs.

Within the warranty period of three years, in case of a notification of defects, repairing is free of charge. This is NOT valid for the replacement of semiconductor devices like MOSFETs or GaAs FETs. Otherwise, repairing must be paid.

The amplifier must only be run within the specifications.

- The maximum input power must not be exceeded
- The amplifier must only be run within the specified frequency range
- While the amplifier is being run, the load VSWR has to be better than 1.8:1 (better than 10 dB) in case of no built-in isolator
- Depending on the application, the use of a sequence controller is recommended

Too high input power, even for a short time period, can lead to destruction or damage of transistors. Especially MOSFETs are very sensitive to overdrive! MOSFET amplifiers must never be driven into saturation!

All power amplifiers require good cooling. The case temperature must not exceed 55 °C. The amplifier must not be run with opened case!

Already the opening or destroying of the warranty seal has the exclusion of the warranty as result.

Notes: