

KU LNA 700900 A WG, Low Noise Amplifier

7000 ... 9000 MHz

Analog & digital transmission systems Satellite ground station Communication systems

Extremely low noise figure covering a wide frequency range in X-band

Remote power supply via output connector possible

Low-power enable input pin

Reverse polarity protection



Description

The KU LNA 700900 A WG is KUHNE's new X-band super low-noise amplifier and was particularly developed for low-noise receive applications, e.g., satellite ground station equipment. Thanks to the combination of an extremely low noise figure, high bandwidth and gain as well as high P1dB and IP3, very weak input signals can be amplified with low noise to an easy to process power level. The RF input using a WR112 waveguide promises low-loss coupling to the antenna system.

Features

- Extremely low noise figure covering a wide frequency range in X-band
- Remote power supply via output connector possible
- Low-power enable input pin
- Reverse polarity protection

Technical specifications:

Frequency range	7000..9000 MHz
Noise figure @ 18 °C	typ. 0,75 dB, max. 0,9 dB (8,0 GHz ... 9,0 GHz) typ. 0,85 dB, max. 1,0 dB (7,0 GHz ... 8,0 GHz)
Gain	typ. 63 dB
Gain flatness	max. +/- 2 dB
Maximum input power	1 mW
Output power (P1dB)	typ. 13 dBm, min. 10 dBm
Output IP3	typ. 20 dBm, min. 17 dBm
Input return loss (S11)	typ. 8 dB, min. 5 dB
Output return loss (S22)	typ. 15 dB, min. 10 dB
Supply voltage	+9 ... 15 V DC
Current consumption	typ. 220 mA
Operating case temp. range	-40 ... +65 °C
Input connector / impedance	Waveguide WR84 / WG15 / WR112
Output connector / impedance	N-female, 50 ohms
Case	milled aluminium
Dimensions (mm)	99.2 X 76 X 63.5
Weight	440 g (typ.)