

## KU LNA 750850 A WG, Low Noise Amplifier

7500 ... 8500 MHz

Analog & digital transmission systems    Satellite ground station    Communication systems

- Extremely low noise figure
- Remote power supply via output connector possible
- Low-power enable input pin
- Reverse polarity protection

The KU LNA 750850 A WG is KUHNE's newest 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, a high gain and high P1dB and IP3, very weak input signals can be amplified with low noise to a power level that is easy to process. The RF input using a WR112 waveguide promises low-loss coupling to the antenna system.



### Description

The KU LNA 750850 A WG has a bandwidth of 7.5 GHz to 8.5 GHz and is therefore suitable for a variety of applications in the X-band microwave range, e.g., for the amplification of weak satellite signals in low-noise receivers. Moreover, the KU LNA 750850 A WG shows a gain of typically 65 dB and a very low noise figure of typ. in between 0.7 dB and 0.8 dB. A low power enable pin and reverse polarity protection furthermore increase user friendliness.

### Features

- Extremely low noise figure
- Remote power supply via output connector possible
- Low-power enable input pin
- Reverse polarity protection

### Technical specifications:

Frequency range	7500..8500 MHz
Noise figure @ 18 °C	typ. 0.7 dB, max. 0.85 dB (0.8 GHz ... 8.5 GHz) typ. 0.8 dB, max. 0.95 dB (7.5 GHz ... 8.0 GHz)
Gain	typ. 65 dB
Gain flatness	typ. +/- 1 dB
Maximum input power	1 mW
Output power (P1dB)	typ. 13 dBm
Output IP3	typ. +23 dBm
Input return loss (S11)	typ. 8 dB, min. 6 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.)