

KU LNC 8085 C PRO2, Low Noise Converter

Converter for Deep Space Communication with 10 MHz reference input

Finally available:

The X-Band Super Low Noise Converter KU LNC 8085 C PRO2 with 10 MHz reference input.

For an improved Deep Space Communications application!



Description

The LNC 8085 C PRO2 converts the HF range of 8 ... 8.5 GHz into the IF range of 200 ... 1300 MHz.

Four LO frequencies 7200/7400/7600/7800 MHz are permanently stored. In addition, you can control your individual IF range with a LO frequency programmable in 10 MHz steps. The possibility of connecting a 10 MHz reference source also makes it possible for the first time to ensure frequency stability for long-term applications.

Two gain levels can be set: In addition to the low gain stage of typ. 37 dB, a high gain stage of typ. 50 dB is integrated especially for Deep Space users.

The robust and weatherproof design stands for the high-quality workmanship of Kuhne electronic.

Features

- Low noise figure
- Wide bandwidth
- Low phase noise
- High frequency stability of the oscillator due to 10 MHz reference input
- High linearity
- Antenna connection protected against static charging
- Easy mast mounting due to light and compact design
- Three-colour LED indicates unit status and gain mode setting
- Gain mode setting
- Overvoltage protection and reverse polarity protection - Remote power supply via output connector

Application

- Deep Space Communications

Important notes

The total gain of pre-amplifier + attenuator + converter should not exceed 60 dB.

Technical specifications:

Frequency range (RF)	8000..8500 MHz
Maximum input power	1 mW (0dBm)
Frequency range (IF)	200..1300 MHz
Noise figure @ 18 °C	typ. 0.8 dB, max. 1.0 dB
Gain @ 25 °C	typ. 50 dB (high gain), typ. 37 dB (low gain)
Output IP3	20 dBm
LO frequency	7200 MHz, 7400 MHz, 7600 MHz, 7800 MHz

LO accuracy @ 18 °C	1 kHz
LO frequency stability	0.5 ppm
Phase noise @ 1 kHz	typ. -90 dBc/Hz
Phase noise @ 10 kHz	-94 dBc/Hz
Phase noise @ 100 kHz	typ. -105 dBc/Hz
External reference input	10 MHz / 2 ... 10 mW
Supply voltage	+9 ... +36 V DC
Current consumption	typ. 250 mA @ 12V DC
Maximum case temperature	+55 °C
Input connector / impedance	SMA-female, 50 ohms
Output connector / impedance	SMA-female, 50 ohms
Case	milled aluminium, IP43
Dimensions (mm)	82 x 64 x 22
Weight	230 g
Remote power supply via IF	yes