

KU LNC 2027 C PRO2



Manual

Specification

Frequency range (RF) RF input power	2000 ... 2700 MHz max. 1 mW (0 dBm)
Output frequency (IF) Output IP3 Gain (switchable) Noise figure @ 18 °C	160 ... 860 MHz (local oscillator 1840 MHz, 2860 MHz) 200 ... 900 MHz (local oscillator 1800 MHz) 100 ... 800 MHz (local oscillator 1900 MHz) typ. +25 dBm (high gain), typ. +14 dBm (low gain) typ. 35 dB (high gain), typ. 24 dB (low gain) (LO frequency 1840 MHz) typ. 0.8 dB, max. 1.0 dB (LO frequency 1840 MHz, IF amplifier enabled)
LO frequency (switchable) LO accuracy @ 18 °C LO frequency stability (0 ... 40 °C) Phase noise @ 1840 MHz @ 1 kHz @ 10 kHz @ 100 kHz	1840 MHz, 2860 MHz, 1800 MHz, 1900 MHz +/- 2 ppm +/- 3 ppm typ. -98 dBc/Hz typ. -110 dBc/Hz typ. -110 dBc/Hz
Operating case temperature range	-20 ... +55 °C
Supply voltage Current consumption Power consumption	+9 ... 36 V DC typ. 250 mA @ 12V (IF amplifier enabled) typ. 3.0 W
Input connector / impedance Output connector / impedance	N-female, 50 ohms N-female, 50 ohms
Dimensions (mm) Case Weight	82 x 64 x 22 milled aluminium typ. 230 g

Features

- Low noise figure
- Large bandwidth
- Low phase noise oscillator
- High frequency stability of the oscillator
- High linearity
- Antenna port protected against static discharge
- Small and light-weight to allow easy pole mounting
- Tri-colour LED indicates unit status and gain mode setting
- Overvoltage protection and reverse polarity protection
- Remote power supply via output connector

Applications

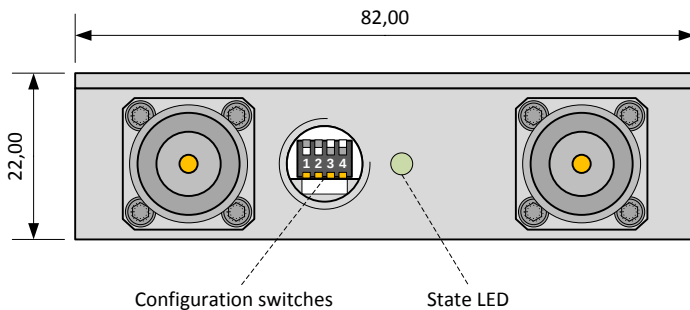
- Multichannel Multipoint Distribution Services (MMDS)
- Digital broadcast systems (DVB-T, DVB-S)
- Analog and digital transmission systems

Sig _____

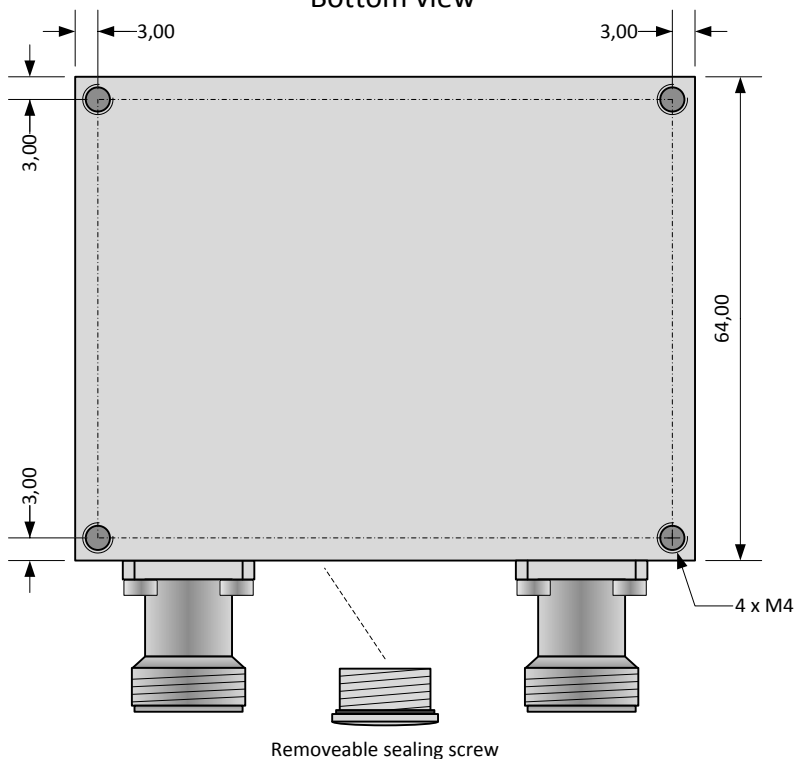
Products are only to be sold to competent companies or to radio amateurs with a licence.
For operating high frequency modules legal instructions must be followed.

QS _____

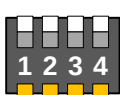
Front view



Bottom view



Configuration Switches / State LED

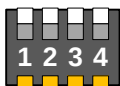


↑ OFF
↓ ON

Switch 1 + 2 - (Local oscillator frequency)

Switch 3 - (Gain)

Switch 4 - (User local oscillator frequency)

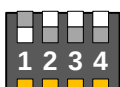


↑ OFF
↓ ON

Switch 1 – OFF / Switch 2 – OFF

LO 1840 MHz

IF 160 ... 860 MHz

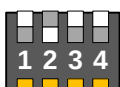


↑ OFF
↓ ON

Switch 1 – ON / Switch 2 – OFF

LO 1800 MHz

IF 200 ... 900 MHz

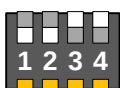


↑ OFF
↓ ON

Switch 1 – OFF / Switch 2 – ON

LO 1900 MHz

IF 100 ... 800 MHz

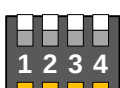


↑ OFF
↓ ON

Switch 1 – ON / Switch 2 – ON

LO 2860 MHz

IF 160 ... 860 MHz (reverse spectrum)



↑ OFF
↓ ON

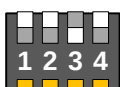
Switch 3 – OFF

Low Gain



State LED

Green



↑ OFF
↓ ON

Switch 3 – ON

High Gain



State LED

Blue



Device Error

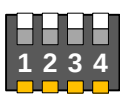


State LED

Red



Configuration Switches / State LED



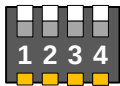
↑ OFF
↓ ON

Switch 1 + 2 - (Local oscillator frequency)

Switch 3 - (Gain)

Switch 4 - (User local oscillator frequency)

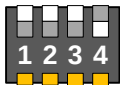
User defined local oscillator frequency



↑ OFF
↓ ON

Switch 4 – OFF

Local oscillator configuration with Switch 1 + 2



↑ OFF
↓ ON

Switch 4 – ON

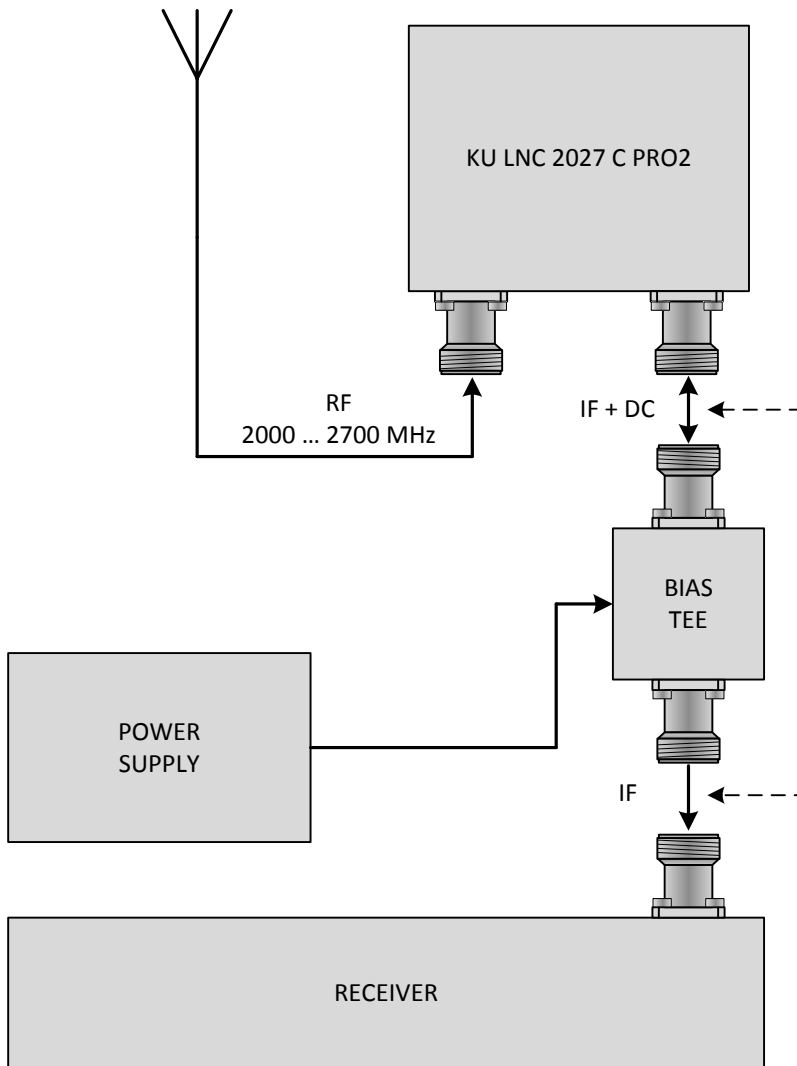
Local oscillator configuration with Switch 1 + 2 disabled
User defined local oscillator frequency is enabled

In the case that **Switch 4** is in position **ON** the user defined local oscillator frequency is activated.

This user defined local oscillator frequency can be selected in the range from 1800 ... 1900 MHz and from 2800 ... 2900 MHz. The frequency step size of the oscillator frequency is 10 MHz.

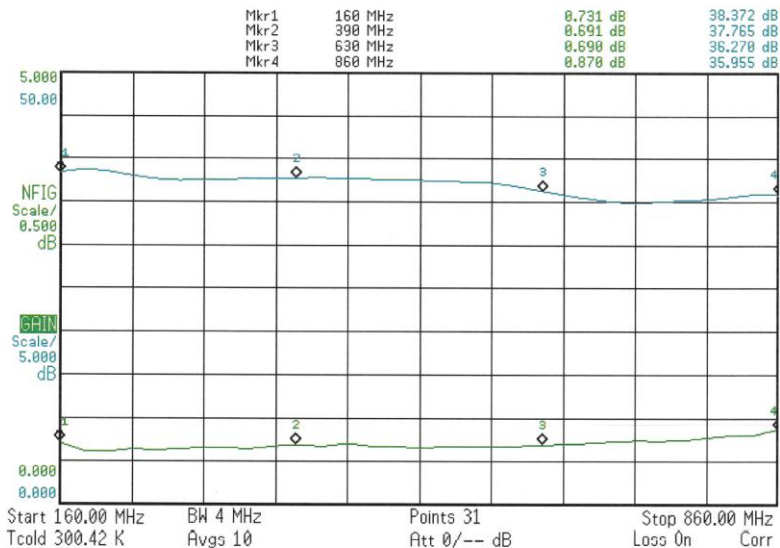
The user defined oscillator frequency can be programmed with a special programming cable.

For example the oscillator frequency can be chosen to 1870 MHz or 2820 MHz .

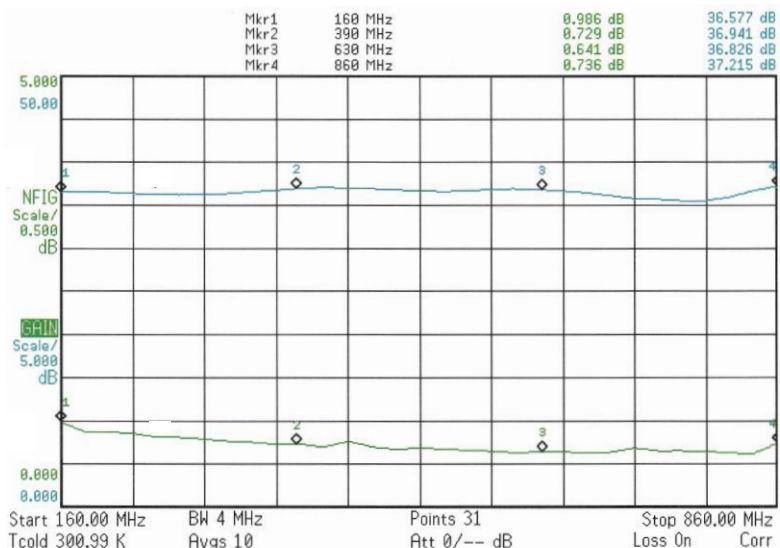


Typical performance

Typical gain and noise figure (1840 MHz local oscillator frequency)

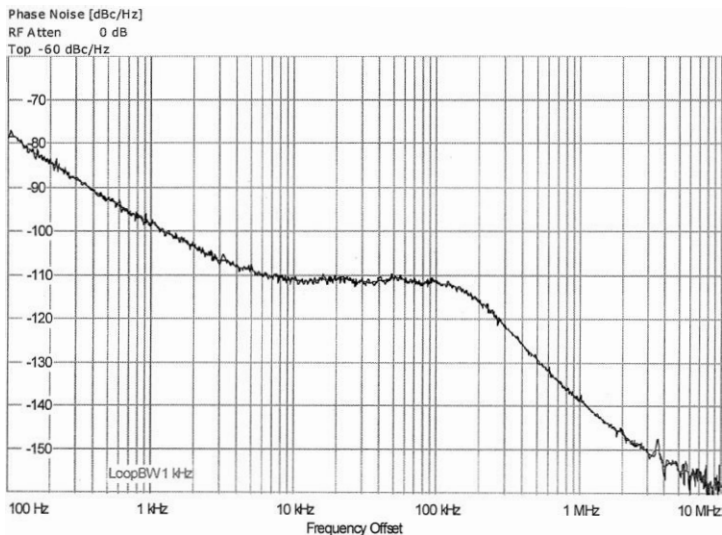


Typical gain and noise figure (2860 MHz local oscillator frequency)



Typical performance

Typical phase noise at 1840 MHz local oscillator frequency



Typical phase noise at 2860 MHz local oscillator frequency

