

MKU 57 G4, 6 cm Transverter

5760 ... 5762 MHz



Transverter

Description

The MKU 57 G4 is our new 6cm transverters evolution step. It features the standard IF frequencies 144 / 146 MHz and 432 / 434 MHz in one module. The IF frequency can be setup up by the customer with jumpers. The high-quality VCTCXO oscillator guarantees an excellent frequency stability without external reference frequency. For even higher stability requirements the external 10 MHz reference frequency input can be used.

Find a detailed description under downloads.

Features

- User selectable IF (2m / 70 cm)
- Local-Oscillator with high frequency stability VCTCXO
- Additional input for 10 MHz reference frequency
- Big attenuator at the IF input for input power up to 5 watts
- Fuses are self-resettable (polyfuses)
- Super low noise converter in the receive path
- Transmit gain and receive gain separately adjustable
- Control output for additional amplifier stages or a coaxial relay
- PTT can be switched by voltage on the IF connector or by connecting the PTT pin to ground
- Detector output (DC voltage) for monitoring the output power

Accessories

- As a 10 MHz frequency source we recommend the 10 MHz GPS-Frequency Standard by ID Elektronik, DK2DB
- 10 MHz GPS-Frequency Standard (ID Elektronik, DK2DB)

Technical specifications:

RF range	5760 ... 5762 MHz
IF range	144 ... 146 MHz
-	146 ... 148 MHz
-	432 ... 434 MHz
-	434 ... 436 MHz
IF input power	0.5 ... 5 W, adjustable
LO accuracy @ 18 °C	typ. +/- 0.5 ppm (without ext. ref.)
LO frequency stability (-5 ... +55 °C)	typ. +/- 0.5 ppm (without ext. ref.)
Phase noise @ 1 kHz	typ. -98 dBc/Hz
Phase noise @ 10 kHz	typ. -105 dBc/Hz
Phase noise @ 100 kHz	typ. -100 dBc/Hz
Phase noise @ 1 MHz	typ. -125 dBc/Hz
Output power	typ. 250 mW
Spurious rejection	min. 40 dB, typ. 50 dB
Harmonic rejection	typ. 50 dB
RX gain	min. 20 dB
Noise figure @ 18 °C	typ. 1.0 dB, max. 1.2 dB
External reference input	10 MHz / 2 ... 10 mW (sine or square wave)

Reference input connector	SMA-female, 50 ohms
PTT control	contact closure to ground or +12 V on the IF-cable
Supply voltage	+13.8 V DC (+12 ... 14 V DC)
Current consumption	typ. 0.8 A (TX)
Case	milled aluminium
Dimensions (mm)	155 x 63 x 36
IF connectors / impedance	SMA-female, 50 Ohms
RF connectors / impedance	SMA-female, 50 ohms
Weight	370 g (typ.)