



Buc-ku04 v2



Block Up-Converter Ku-band 4W v2 is BUC which operates with up to 25 carriers. Fixed output power P1dB 4W (400 mW ALC power). Inbuilt reference 10MHz and ALC with 25dB range. At the rear side BUC has LEDs status indication.

The Block Up-Converter Ku-band 4W Verison 2 (BUC-Ku04 v2) is designed for operation in MVDS/MITRIS TV broadcasting systems according to standard DVB-S/S2 or DVB-C and operates up to 25 carriers. This device has PBR120 flange output and can be used with regular RRL or broadcast antennas. Supported modulation types are up to 32APSK, 256QAM. Stability of the output frequency and IMD3 level are very important for providing the modulation quality, so the local oscillator is locked by PLL with internal frequency reference. The device has the best linearity parameters in order to provide the lowest IMD3 level. The BUC-Ku04 v2 provides any 1000 MHz output bandwidth in Ku-band for 950 – 1950MHz input frequencies by order.

- **Typical LO frequencies (GHz):** 8.8; 9.75; 9.8; 10.0; 10.6; 10.75; 10.8; 11.3; 11.8; 12.8; 13.05 **(or by order)**

KEY FEATURES:

- PBR120 flange output
- Output power: 4W P1dB minimum
- Output frequencies: any 1000 MHz in Ku-band (10 – 15 GHz) by order
- Input frequencies: 950 – 1950 MHz
- Min. gain: 56 dB
- Highly stable Internal reference
- LO is locked by PLL with internal frequency reference.
- Lowest IMD3 at ALC output: -37 dBc max
- Operates up to 25 carriers
- 32APSK and 256QAM are supported
- Designed for operation in MVDS/MITRIS TV broadcasting systems

Input parameters:	
Input Frequency range	950 – 1950 MHz
Input impedance	50 Ohm
Input level, max	-15 dBm
Input VSWR, max	1.5
Input interface	N-type Female

ALC range, min	25 dB
ALC threshold level	-30 dBm
Local Oscillator:	
LO frequency	10750MHz (or by order)
LO Phase noise:	
@1 kHz	-80 dBc/Hz
@10 kHz	-85dBc/Hz
@100 kHz	-100dBc/Hz
LO instability	± 2ppm
Output parameters:	
Output frequency range	11700– 12700MHz (or any 1000 MHz in Ku-band by order)
Output Power @P1dB	4 W
ALC Output Power	400 mW
Gain, min	56 dB
IMD3 level at ALC Output Power, max	-37 dBc
Output interface	Waveguide WR75, Flange PBR120
Output VSWR, max	2
Frequency Response:	
Flatness over Full Band	±1.5 dB
Spurious:	
In-band @P1dB, max	-55 dBc
Out-Band, max	-30 dBm
LO leakage at ALC output power, max	-40 dBm
Image rejection, min	60 dB
Power Supply:	
Input voltage	18 VDC – 30 VDC, nominal 24 VDC
Power consumption, max	17 W
Environmental:	
Operating temperature	-40°C to +50°C (-40°F to +122°F)
Storage temperature	-60°C to +80°C (-76°F to +176°F)
Operating humidity	100%, non-condensing
Mechanical	
Dimensions (W x H x D)	122x85x130 mm
Weight	1.1 kg