



## Buc-ku002 v2



Block Up-Converter Ku-Band 0.2W v2 is BUC which operates with up to 25 carriers. Fixed output power P1dB 0.2W (30 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 0.2W Version 2 (BUC-Ku002 v2) is designed for operation in MVDS/MITRIS TV broadcasting systems according to DVB-S/S2 or DVB-C standards 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. The stability of the output frequency and IMD3 level are very important for modulation quality, so the local oscillator is locked by PLL with internal frequency reference. The device has the best linearity parameters to provide the lowest IMD3 level. The BUC-Ku002 v2 provides any 1000 MHz output bandwidth in Ku-band for 950 - 1950 MHz input bandwidth 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: 0.2W P1dB minimum
- Output frequencies: any 1000 MHz in Ku-band (10 - 15 GHz) by order
- Input frequencies: 950 - 1950 MHz
- Min. gain: 45 dB
- Internal reference with high stability
- 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:	
<b>Input Frequency range</b>	950 - 1950 MHz
<b>Input impedance</b>	50 Ohm
<b>Input level, max</b>	-15 dBm
<b>Input VSWR, max</b>	1.5
<b>Input interface</b>	N-type Female
<b>ALC rage, min</b>	25 dB
<b>ALC threshold level</b>	-30 dBm
Local Oscillator:	
<b>LO frequency</b>	10750MHz (or by order)
<b>LO Phase noise:</b>	

<b>@1 kHz</b>	-80 dBc/Hz
<b>@10 kHz</b>	-85dBc/Hz
<b>@100 kHz</b>	-100dBc/Hz
<b>LO instability</b>	± 2ppm
<b>Output parameters:</b>	
<b>Output frequency range</b>	11700- 12700MHz (or any 1000 MHz in Ku-band by order)
<b>Output Power @P1dB</b>	0.2 W
<b>ALC Output Power</b>	30 mW
<b>Gain, min</b>	45 dB
<b>IMD3 level at ALC Output Power, max</b>	-37 dBc
<b>Output interface</b>	Waveguide WR75, Flange PBR120
<b>Output VSWR, max</b>	2
<b>Frequency Response:</b>	
<b>Flatness over Full Band</b>	±1.5 dB
<b>Spurious:</b>	
<b>In-band @P1dB, max</b>	-55 dBc
<b>Out-Band, max</b>	-30 dBm
<b>LO leakage at ALC output power, max</b>	-40 dBm
<b>Image rejection, min</b>	60 dB
<b>Power Supply:</b>	
<b>Input voltage</b>	18 VDC - 30 VDC, nominal 24 VDC
<b>Power consumption, max</b>	6 W
<b>Environmental:</b>	
<b>Operating temperature</b>	-40°C to +50°C (-40°F to +122°F)
<b>Storage temperature</b>	-60°C to +80°C (-76°F to +176°F)
<b>Operating humidity</b>	100%, non-condensing
<b>Mechanical</b>	
<b>Dimensions (W x H x D)</b>	60x40x130 mm
<b>Weight</b>	0.55 kg

Taking into consideration that we (ROKS PrJSC) are developer and system integrator, also do not stop on our technical growth and improvement, know that view of all our devices and equipment including their technical parameters may be different from pictures presented on website and parameters listed on each device webpage.

**Note!** All details customer has to confirm in advance during ordering and before payment. Those parameters that were not specified and / or were not agreed while ordering will be implemented as basic at the discretion of the manufacturer. Each our customer has 1.5 year warranty and 7 year aftersales support for whole range of our products.