

## **BUC-KU20-12.8**



BUC-Ku20-12.8 is block up-converter with fixed output power P1dB **20 W** (ALC power: 2000 mW) and LO of **12.8 GHz**.

Our BUC operates with up to 25 carriers and has built-in reference of 10 MHz;

and ALC with 25 dB range;

+ LED status indication at the rear side.

20 W Ku-band block up-converter with LO of 12.8 GHz BUC-Ku20-12.8 is designed for MVDS TV broadcasting systems application in accordance with DVB-S/S2 or DVB-C standards (use "Customized" button to choose needed parameters) and operates with up to 25 carriers. BUC-Ku20-12.8 has output flange of PBR120 type and can be used with regular radio-relay link (directional) or broadcast (sector and OMNI) antennas. BUC-Ku20-12.8 supports all modulation types up to 32APSK and 256QAM (you may choose the modulation type while filling the "customized equipment" form). BUC-Ku20-12.8 has the best linearity parameters to ensure the stability of the output frequency and low IMD3 level (these parameters are very important for high quality modulation, therefore the local oscillator of BUC-Ku20-12.8 is locked by PLL with internal frequency reference). BUC-Ku20-12.8 provides 13.75 – 14.75 GHz output frequency range (bandwidth in Ku-band) for 950-1950 MHz input frequency range (bandwidth in L-band).

**LO:** 12.8 GHz **IN**: 950 – 1950 MHz **OUT**: 13.75 – 14.75 GHz

## **KEY FEATURES:**

• Output flange: PBR120

• Output power (P1dB, min): 20 W

• Output frequency range: 13.75 – 14.75 GHz

• Input frequency range: 950 – 1950 MHz

• Gain (min): 63 dB

• Highly stable internal frequency reference

• LO is locked by PLL with internal frequency reference

• IMD3 level at ALC output power (the lowest value): -37 dBc max

• Operates with up to 25 carriers

• Supported modulation types: up to 32APSK and 256QAM

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 rage, min	25 dB	
ALC threshold level	-30 dBm	
Local Oscilator:		
LO frequency	12800 MHz	
LO Phase noise:		
@1 kHz	-80 dBc/Hz	
@10 kHz	-85 dBc/Hz	
@100 kHz	-100 dBc/Hz	

LO instability	± 2 ppm	
Output parameters:		
Output frequency range	13750 — 14750 MHz	
Output Power @P1dB	20 W	
ALC Output Power	2000 mW	
Gain, min	63 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	45 W	
Environmental:		
Operating temperature	-40 to +50 (-40 to +122 )	

Storage temperature	-60 to +80 (-76 to +176 )	
Operating humidity	100%, non-condensing	
Mechanical:		
Dimensions (W x H x D)	143x92x220 mm	
Weight	2.86 kg	

Taking into consideration that we (UMT LLC) 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.