

## BUC-KU20-10.6



BUC-Ku20-10.6 is block up-converter with fixed output power P1dB **20 W** (ALC power: 2000 mW) and LO of **10.6 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 10.6 GHz BUC-Ku20-10.6 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-Ku20-10.6 has output flange of PBR120 type and can be used with regular radio-relay link (directional) or broadcast (sector and OMNI) antennas. BUC-Ku20-10.6 supports all modulation types up to 32APSK and 256QAM (you may choose the modulation type while filling the "customized equipment" form). BUC-Ku20-10.6 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-Ku20-10.6 is locked by PLL with internal frequency reference). BUC-Ku20-10.6 provides 11.55 - 12.55 GHz output frequency range (bandwidth in Ku-band) for 950-1950 MHz input frequency range (bandwidth in L-band).

**LO:** 10.6 GHz **IN**: 950 - 1950 MHz **OUT**: 11.55 - 12.55 GHz

## **KEY FEATURES:**

• Output flange: PBR120

• Output power (P1dB, min): 20 W

Output frequency range: 11.55 - 12.55 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 O	scilator:
LO frequency	10600 MHz
LO Phase noise:	
@1 kHz	-80 dBc/Hz
@10 kHz	-85dBc/Hz
@100 kHz	-100dBc/Hz
LO instability	± 2ppm
Output pa	rameters:
Output frequency range	11550 - 12550 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
Flatness over Full Band Spur	ious:
Flatness over Full Band	
Flatness over Full Band Spur	ious:
Flatness over Full Band Spur In-band @P1dB, max	ious: -55 dBc
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max	ious: -55 dBc -30 dBm
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min  Power	ious: -55 dBc -30 dBm -40 dBm 60 dB
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min	ious: -55 dBc -30 dBm -40 dBm 60 dB supply: 18 VDC - 30 VDC, nominal 24 VDC
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min  Power Input voltage  Power consumption, max	-55 dBc -30 dBm -40 dBm 60 dB  supply: 18 VDC - 30 VDC, nominal 24 VDC 45 W
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min  Power Input voltage  Power consumption, max  Environ	-55 dBc -30 dBm -40 dBm 60 dB  supply: 18 VDC - 30 VDC, nominal 24 VDC 45 W  mental:
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min  Power Input voltage  Power consumption, max  Environ Operating temperature	-55 dBc -30 dBm -40 dBm 60 dB  supply: 18 VDC - 30 VDC, nominal 24 VDC 45 W  mental: -40°C to +50°C (-40°F to +122°F)
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min  Power Input voltage  Power consumption, max  Environ  Operating temperature  Storage temperature	-55 dBc -30 dBm -40 dBm 60 dB  supply:  18 VDC - 30 VDC, nominal 24 VDC 45 W  mental: -40°C to +50°C (-40°F to +122°F) -60°C to +80°C (-76°F to +176°F)
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min  Power Input voltage  Power consumption, max  Environ Operating temperature  Storage temperature Operating humidity	-55 dBc -30 dBm -40 dBm 60 dB  supply:  18 VDC - 30 VDC, nominal 24 VDC 45 W  mental:  -40°C to +50°C (-40°F to +122°F) -60°C to +80°C (-76°F to +176°F)  100%, non-condensing
Flatness over Full Band  Spur In-band @P1dB, max  Out-Band, max  LO leakage at ALC output power, max  Image rejection, min  Power Input voltage  Power consumption, max  Environ Operating temperature  Storage temperature  Operating humidity	-55 dBc -30 dBm -40 dBm 60 dB  supply:  18 VDC - 30 VDC, nominal 24 VDC 45 W  mental: -40°C to +50°C (-40°F to +122°F) -60°C to +80°C (-76°F to +176°F) 100%, non-condensing
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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.