

BUC-C04



BUC-C04 **Block Up Converter (400 mW)**. **BUC-C04 25 10 MHz**
ALC 25 dB LED CWT

4W C-band block up-converter BUC-C04 is **designed for MVDS TV broadcasting systems** application in accordance with **DVB-S/S2, DVB-C** or **DVB-T** standards (fill the form of needed parameters using “customized equipment” button) and operates with up to **25 carriers**. BUC-C04 has integrated matched coaxial to waveguide transition and can be used with regular radio-relay link (directional) or broadcast (sector and OMNI) antennas. BUC-C04 supports the following modulation types: **16APSK, 256QAM** and **COFDM** (you may choose the modulation type while filling the “customized equipment” form). The local oscillator of BUC-C04 is locked by PLL with internal frequency reference and 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). BUC-C04 provides 4 – 4.2 GHz output frequency range (or any 200 MHz in C-band) for 470 – 670 MHz input frequency range (either any other UHF or L-band – by order).

KEY FEATURES:

- Integrated matched coaxial waveguide transition
- Output power (P1dB, min): 4W
- Output frequency range: 4 – 4.2 GHz (or any 200 MHz in C-band by order – fill the “customized equipment” form)
- Input frequency range: 470 – 670 MHz (you may choose other UHF or L-band – fill the “customized equipment” form)
- Gain (min): 60 dB
- Highly stable internal frequency reference

- LO is locked by PLL with internal frequency reference
- IMD3 level at ALC output power (the lowest value): -45 dBc max
- Operates with up to 25 carriers
- Supports: 16APSK, 256QAM and COFDM

Input parameters	
Input frequency range	470 – 670 MHz (UHF or L-band (by order) – fill the “customized equipment” form)
Input impedance	50 Ohm
Input level, max	-10 dBm
Input VSWR, max	1.5
Input interface	N-type Female
ALC range, min	25 dB
ALC threshold level	-35 dBm
Local Oscillator	
LO frequency	4670 MHz (or by order)
LO phase noise:	
@1 kHz	-80 dBc/Hz
@10 kHz	-90dBc/Hz
@100 kHz	-100dBc/Hz
LO instability	± 2ppm
Output parameters	

Output frequency range	4000 – 4200 MHz (or any 200 MHz in C-band by order)
Output Power @P1dB	4 W
ALC Output Power	400 mW
Gain, min	60 dB
IMD3 level at ALC Output Power, max	-45 dBc
Output interface	Waveguide WR229, Flange PDR40
Output VSWR, max	1.3
Frequency Response	
Flatness over Full Band	±1 dB
Spurious	
In-band @P1dB, max	-50 dBc
Out-Band, max	-60 dBc
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 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)	130x80x175 mm
Weight	1.8 kg

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