

## BUC-KU40-9.75 + IP CTRL



**BUC-Ku40-9.75 + IP Ctrl** is block up-converter with fixed output power P1dB **40 W** (Output Power ( $P_{sat}$ ) 46 dBm) and LO of **9.75 GHz**.

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

and **ALC** adjustment level range (nominal) -9 ... +4 dB from **P<sub>ALC</sub>**;

+ **LED status** indication at the rear side.

BUC-Ku40 is designed for MVDS TV broadcasting systems application in accordance with DVB-S/S2 and operates with up to 25 carriers. BUC-Ku40 has output flange of PBR120 type and can be used with regular radio-relay link or broadcast antennas. BUC-Ku40 supports all modulation types up to 32APSK. BUC-Ku40 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-Ku40 is locked by PLL with internal frequency reference).

### KEY FEATURES:

- Output flange: PBR120
- Output power ( $P_{sat}$ , min): 40 W
- Any LO frequency by order: 8.8, 9.75, 10.6, 10.75, 10.8, 11.3, 11.8, 12.8, 13.05 (or other by request)
- Output frequency range: any 800-1000 MHz in Ku-band (10-15 GHz) by order
- Input frequency range: 950 – 1750 MHz (950-1950 MHz by order)
- Gain (min): 71 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 20 carriers
- Supported modulation types: up to 32APSK

Input parameters:		
Input Frequency range		950 – 1750 MHz (950-1950 MHz by order)
Input impedance		50 Ohm
Input level, max		-15 dBm
Input VSWR, max		1.5
Input interface		N-type Female
ALC range, min		25 dB
Local Oscillator:		
LO frequency		9750 MHz (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		10700 – 11500 MHz (or by order)
Output Power $P_{sat}$		46 dBm
ALC Output Power with adjustment, $P_{ALC}$		36 dBm*
ALC adjustment level range (nominal)		-9 ... +4 dB from $P_{ALC}$

Gain, min	72 dB
IMD3 level at ALC Output Power, max	-37 dBc
Output interface	Waveguide WR75, Flange PBR120
Output VSWR, max	2
<b>Frequency Response:</b>	
Flatness over Full Band	±1.5 dB
<b>Spurious:</b>	
In-band $P_{sat}$ , max	-55 dBc
Out-Band, max	-30 dBm
LO leakage at ALC output power, max	-40 dBm
Image rejection, min	60 dB
<b>Power supply:</b>	
Input voltage	20 VDC – 55 VDC, nominal 48 VDC
Power consumption, max	< 100 W
<b>Interfaces:</b>	
IF input connector: N-type female / RF output connector: WR75 (PBR120)	
DC connector: C90-3102R10SL-4P / Monitor & Control connector: UTS014E19P	
Monitor & Control: Step level for ALC, Ethernet	
LED indicator: Green – OK, blink Green – MUTE, Yellow – AGC active, Red – Alarm	
<b>Environmental:</b>	
Operating temperature	-30 to +55

Storage temperature	-40 to +70
Operating humidity	100%, non-condensing
<b>Mechanical:</b>	
Dimensions	260x135x92mm
Weight, max	5 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.*