

## BUC-K-1-23.55



BUC-K-1-23.55 is block up-converter with fixed output power P1dB 1 W (ALC power: 100 mW) and LO of 23.55 GHz.

BUC-K-1-23.55 is designed for MVDS TV broadcasting systems application in accordance with DVB-S/S2 or DVB-C and operates with up to 25 carriers. BUC-K-1-23.55 has output flange of PBR260 type (in accordance with WR34) and can be used with regular radio-relay link ([directional](#)) or broadcast ([sector](#) and [OMNI](#)) antennas.

BUC-K-1-23.55 supports all modulation types up to 32APSK and 256QAM. BUC-K-1-23.55 has the best linearity parameters to ensure the stability of the output frequency and low IMD3 level. BUC-K-1-23.55 has input frequency range of 950-1450 MHz (L-band) and provides 24.5-25.0 GHz output frequency range (K-band).

Input parameters	
Input frequency range, MHz	950 - 1450
Input impedance, Ohm	50
Input level, max, dBm	-2
Input VSWR, max	1.5
Input interface	N-type, female
ALC range, min, dB	25
ALC threshold level, dBm	-27
Local oscillator	
LO frequency, GHz	23.55
LO phase noise, dBc/Hz :	
@1 kHz	-80
@10 kHz	-85
@100 kHz	-100
LO instability, ppm	± 2
Output parameters	
Output frequency range, GHz	24.5-25.0
Output power @P1dB, W	1
ALC output power, mW	100
Gain, min, dB	47

IMD3 level at ALC output, dBc power, max	-37
Output interface	waveguide WR34, flange PBR260
Output VSWR, max	2
<b>Frequency response</b>	
Flatness over Full Band, dB	$\pm 1.5$
<b>Spurious</b>	
In-band P1dB, max, dBc	-55
Out-Band, max, dBm	-30
LO leakage at ALC output, dBm power, max	-40
Image rejection, min, dB	60
<b>Power supply</b>	
Input voltage, VDC	18-30 (nominal 24)
Power consumption, max, W	20
<b>Environmental</b>	
Operating temperature, °C	-40 ... +50
Storage temperature, °C	-60 ... +80
Operating humidity, %	100 (non-condensing)
<b>Mechanical</b>	
Dimensions (W x H x D), mm	121×130×79
Weight, kg	1.51

*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.