

## **DOWNCONVERTER**



Downconverter is designed to convert signals from L-band to 70 MHz IF for further signal processing on this IF. It is used in satellite communication systems of L, S, C, X and Ku bands.

Parameter name, units	Nominal value, tolerance
Input frequency range, MHz	from 950 to 2150
Frequency tuning step, kHz	1
Frequency instability, ppm	0.01
The phase noise power spectral density, dBc/Hz, when detuned from the carrier by:  100 Hz 1 kHz 10 kHz 100 kHz 1 MHz	- 70 - 90 - 95 - 95 - 100
Channel Bandwidth, MHz	36
The maximum allowable input signal level, dBm	- 20

Output power level with 1dB compression (P1dB out), dBm, not less than	0
The IMD3 value with two output signals of -13dBm, dBm, not more than	<b>- 40</b>
Conversion gain, dB, not less than	30
Gain adjustment depth, dB, not less than	- 30
Gain adjustment step, dB	1.0
Input impedance, Ohm	50
Input return loss, dB	<b>– 18</b>
Control and monitoring mode	Local and remote
Remote mode interface	Ethernet 10/100 Base T
Impedance of radio frequency output, Ohm	50
VSWR of radio frequency output	1.8:1
Spurious emissions in the working band, dB, not more than	- 60
Reference oscillator frequency, MHz	10
Phase noise of the reference oscillator, dBc/Hz when detuned from the carrier by:	
10 Hz 100 Hz 1 kHz 10 kHz	-125 -140 -150 -155
AC power supply voltage with frequency 50Hz, ∨	100 – 262

Overall dimensions (without connectors), mm	482 x 300 x 44
Weight, kg, not more than	5.0

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.