



EXTENDED KU-BAND UP-CONVERTER 13.75-14.5 GHZ



Extended Ku-band upconverter covering 13.75-14.5 GHz: converts 950-1750 MHz IF with a 12.8/13.05 GHz LO locked to an external 10 MHz reference, providing 10 dBm P1dB and 5-30 dB gain in a compact IP54 indoor unit with N-type connectors.

Input parameters	
Input frequency range	950-1750 MHz
Input impedance	50 Ohm
Input/Output VSWR, max	1.5
Input interface	N-type
Local Oscillator	
LO frequency	12800/13050 MHz
LO phase noise @10 Hz	-35 dBc/Hz
LO phase noise @100 Hz	-67 dBc/Hz
LO phase noise @1 kHz	-77 dBc/Hz
LO phase noise @10 kHz	-85 dBc/Hz
LO phase noise @100 kHz	-97 dBc/Hz

LO phase noise @1 MHz	-105 dBc/Hz
LO instability	By external reference
Output parameters	
Output frequency range	13.75-14.5 GHz
P1dB, min	10 dBm
Gain (fixed or adjustable)	5-30 dB
Gain adjustment (option)	5-30 dB
IMD3 (two tones)	-30 dBc max, 2 signals 5 MHz apart @ 6 dB back-off from P1dB
Output interface	N-type female
Output VSWR, max	1.5:1
RF isolation at ALARM, min	-80 dB
Frequency Response	
Flatness @ Full Band	± 1 dB
Flatness @ 40 MHz	± 0.4 dB
External reference	10 MHz
Spurious	
Spurious @P1dB, max	-60 dBc
LO leakage, without signal	-75 dBm
Power Supply	
Input voltage	10-24 VDC
Power consumption, max	< 9 W

Environmental	
Operating temperature	-40°C to +60°C
Storage temperature	-40°C to +95°C
Operating humidity	Up to 60%, non-condensing (IP54)
Interfaces	
LED monitoring	10 MHz locked status, Alarm
Mechanical	
Dimensions	115x120x38 mm
Weight, max	0.95 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.