



C-BAND UP CONVERTER

Model No: US/UC/70-C/C

Features

- Low phase noise
- Fine frequency step
- Low intermodulation distortion
- Dual conversion
- Built-in high stability internal reference
- High reliability
- Remote / manual control

Specifications

70 MHz to C-Band Up Converter		
Input Frequency Range		52 - 88 MHz
Input Level		-35 dBm (typical)
Input Return Loss		18 dB min.
Input Impedance		50 ohms
Output Frequency Range		5850 - 6450 MHz
Conversion		Dual Conversion, No Inversion
Step Size		1 KHz
Stability (Time)		$\pm 1 \times 10^{-9}$ / Day
Stability (Temp.)		$\pm 1 \times 10^{-8}$ / Day (0 to 50 ° C)
RF Output Level		+15 dBm @ 1dB comp. (min)
Carrier Mute		60 dB min. rejection
Spurious	Non-Carrier Carrier-Related	-70 dBm -65 dBc @ 0 dBm Output
3rd Order IMP		-50 dBc @ 0 dBm Output SCL
Output Impedance		50 Ohms
Return Loss		16 dB min.
Small signal gain		35 dB \pm 2 dB
Gain Adjustability		0 - 25 dB in 0.25 dB steps
Gain Stability		± 0.25 dB/Day max.
Gain Ripple		± 0.3 dB max.
Gain Slope		0.1 dB/MHz max.
IF Bandwidth		36 MHz
AM/PM Conversion		0.1°/dB @ -5 dBm Output
External Reference		10MHz @ +3 dBm

70 MHz to C-Band Up Converter		
Group Delay	Linear Parabolic Ripple	0.03 ns/MHz 0.01 ns/MHz ² 1.0 ns peak-to-peak
Phase Noise @ offset		100 Hz : -68 dBc/Hz 1K Hz : -78 dBc/Hz 10K Hz : -88 dBc/Hz 100K Hz : -96 dBc/Hz 1M Hz : -108 dBc/Hz
Remote Control Interface		RJ-45 LAN Port: SNMP & Remote Control protocol details to be provided for monitoring & control.
Front Panel display		Suitable LCD display for displaying important parameters such as Frequency, Attenuation /Gain & Mute/Transmit status etc.
Front Panel Indicators (LED)		Power ON/OFF, Mute ON/OFF, Local /Remote
Test Points		RF Sample: SMA (F)/ N (F), -20 dBc ± 2 dB IF Sample: BNC (F), -20 dBc ± 2 dB
Power		Power ON Switch, 230 VAC, 50 Hz
Operating ambient temperature		0 to 50 ° C
Humidity		Up to 95 % RH, Non-Condensing
Mechanical		19" Rack Mountable (2U Unit)

Applications

- Satellite Communications
- TT & C
- Military & Civil
- Tracking Earth Stations
- Beacon Reception

