



# S-BAND UP CONVERTER

Model No: US/UC/70-S/E

## 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 S-Band Up Converter	
Input Frequency	70 MHz $\pm$ 4 MHz
Input Level (Dynamic range required for I/P IF Signal to get desired RF O/P level)	0 to -30 dBm
Type of Conversion	Double Conversion without Inversion
Frequency Sense	No Inversion
Frequency selection step size	1 KHz
Frequency Resolution	1 KHz
Output Frequency Range	2025 - 2120 MHz
RF O/p Level	-3 to +17 dBm range, adjustable in 1 dB step (20 dB attenuation range)
Maximum O/P level at P1 dB point	+17 dBm
3-dB Bandwidth ( for IF O/P)	$\pm$ 10 MHz
Output Stability	$\pm$ 0.5 dB over 8 hrs.
I/P or O/P Impedance	50 ohms
I/P & O/P VSWR	$\leq$ 1.4:1 max.
Noise Figure	12 dB at max. gain
Group Delay Stability with temperature	< 5 ns over 8 hrs. & for temp range 5-45 deg C
Spurious Outputs	Signal Related: 60 dBc (In Band) Signal Independent: 70 dBc (In 2200-2300 MHz Band)
Image Rejection	60 dB min.
RF O/P Signal Monitor	-20 dBc Nominal, N-Type

70 MHz to S-Band Up Converter	
Phase Noise	1 KHz away: -85 dBc / Hz 10 KHz away: -95 dBc / Hz
Internal Reference Stability	$5 \times 10^{-8}$ over temperature range
External Reference Input	5 / 10 MHz, -3 to +3 dBm, 50 ohms BNC, Real panel
Local & Remote Functions	Frequency selection & display LO lock indication External Reference Failures / Alarms Local / Remote
M & C Interface	TCP/IP Ethernet
RF / IF Connectors	N-type, Rear Panel
LO Monitor	SMA, Front Panel
Input Power	230 V $\pm$ 10%, 50 Hz
Operating ambient temperature	5 to 45 deg C
Humidity	Up to 95 %
MTBF	> 50,000 Hours
MTRR	30 min.
Mechanical	19" Rack Mountable ( 2U Unit)

## Applications

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

