

### Features

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

### Specifications

C-Band to 70 MHz Down Converter		
Input Frequency		3625 to 4200 MHz
Type of Conversion		Double Conversion without Inversion
Frequency Sense		No Inversion
Frequency selection step size		1 KHz
Input Level		-80dBm to -40dBm
Output Frequency		50 - 90 MHz
I/P or O/P Impedance		50 ohms
Output level @1dB Compression Point		+17 dBm min.
I/P Return Loss		20 dB min.
O/P Return Loss		23 dB min.
Gain		45dB min.,
Gain Slope		± 0.25 dB / MHz
Gain Flatness (36 MHz)		± 0.25 dB
Gain Stability		± 0.25 dB /day max.
Noise Figure		10 dB at max. gain
Group delay variation	Linear Parabolic Ripple	0.03 ns / MHz 0.01 ns / MHz <sup>2</sup> 1 ns p-p
Intermodulation		- 60dBc at 0dBm
Image Rejection		- 80dB in Band
Spurious Outputs		Signal Related: - 65 dBc Signal Independent: - 80 dBm max.
Phase Noise		100 Hz away : -70 dBc/Hz 1 KHz away : -79 dBc/Hz 10 KHz away : -89 dBc/Hz 100kHz away: -99 dBc/Hz 1MHz away : -110 dBc/Hz

C-Band to 70 MHz Down Converter	
Internal Reference	10MHz, $\pm 5 \times 10^{-8}$ / day
External Reference Input	5 / 10 MHz, $0 \pm 3$ dBm
Local & Remote Functions	Frequency selection & display LO lock indication Channel gain adjustment & display Reference Int./ext. Failures / Alarms Local / Remote
M & C Interface	TCP/IP-LAN (100 Mbps) at rear panel, RJ45 connector
Front Panel display	Suitable LCD display for displaying important parameters such as Frequency, Attenuation /Gain & Mute/Transmit status etc.
RF / IF Connectors	N-type (F) / SMA (F) , Rear Panel
O/P Connectors	BNC-type / N-type(F) , Rear Panel
Test Points	RF Sample: SMA (F)/ N (F) , $-20$ dBc $\pm 2$ dB IF Sample: BNC (F)/ SMA (F) , $-20$ dBc $\pm 2$ dB
LO Monitor Connectors	SMA-type, Front Panel
Power Supply	230 VAC , $50 \pm 3$ Hz
Operating temperature	$-10$ to $50$ deg C
Humidity	Up to 95 %, Non-Condensing
MTBF	> 50,000 Hours
MTTR	< 1 hour
Mechanical	19" Rack Mountable ( 1U Unit)
Colour	Light Grey (RAL 7035)

## Applications



Aerospace



Defence



Satcom



Broad Casting

