S-BAND DOWN CONVERTER

Part No: SDC/ 70-2.3GH/R

DATASHEET

Technical Specifications	
Converter type	Down converter
No. of Chains	1
RF Input Frequency	2200 – 2300MHz
IF Output Frequency	70 MHz
IF Filter 3dB Bandwidth	10MHz
IF Filter Rejection	≥30 dBc at IF ± 10MHz
LO modes	Internal and External
RF Output frequency selection	a. Local selection through front panel keys b. Remote selection through GUI application and c. Provision to set/read RF input frequency in both Local and remote modes
Frequency resolution	1 KHz step max.
Internal Reference frequency stability	±0.2 ppm max.
External LO Amplitude level	+10 dBm max.
Conversion gain	10 to 30 dB max.
Programmable gain controllability	a. Local selection through front panel keys b. Remote selection through GUI application and c. Provision to set/read RF input frequency in both Local and remote modes
Programmable Gain resolution	1 dB step
Gain stability	± 1 dB max.
Conversion Sense	No Inversion
Input Dynamic Range	-20 dBm to -80 dBm
Return loss	≥20 dB at all Input and Output ports
Spurious at RF output	≥-50 dBc
Harmonics at RF output	≥-30 dBc
LO Phase noise	≤ -90 dBc/Hz @ ± 1 kHz ≤ -95dBc/Hz @ ± 10 kHz ≤ -100 dBc/Hz @ ± 100KHz
External Reference	10 MHz (In presence of external reference signal, unit must lock on to the external reference automatically) with an acceptable amplitude range of ± 5 dBm.
Isolation between a. LO-RF b. LO-IF c. IF-RF	≥50 dB
LO leakage at IF output	-80dBm max.
Input & Output Impedance	50 ohms
Coupling at RF monitoring	- 10 dB ± 1 dB w.r.t RF output
Coupling at LO monitoring	-10 dB ± 1 dB w.r.t LO set level
RF Input interface	SMA(F)
IF Output interface	SMA(F)
External LO interface	SMA(F)
External Reference interface	SMA(F)
RF Monitoring interface	SMA(F)
LO Monitoring interface	SMA(F)
Monitoring Ports	RS 422 Interface
Remote control interface	Ethernet-LAN
Display Type	LED display
Display Parameters	Frequency, Gain and Attenuation
Local control through Front panel keypad	Functional keys on the front panel to set Output RF input frequency, frequency step, Conversion gain simultaneously
Remote control through GUI	a. Provision to be made in GUI software utility to set and read Output RF. b. Monitoring and control application through GUI along with command code also to be provided input frequency, frequency step, Conversion gain simultaneously.
Operating Temperature	+10 to +50° C
Supply Voltage	230±10% V AC, 50 Hz
Unit	19" Rack mountable, 2U height Unit

#142, 18th 'A' Main, HAL 2nd Stage, Indiranagar, Bengaluru-560 008, INDIA.
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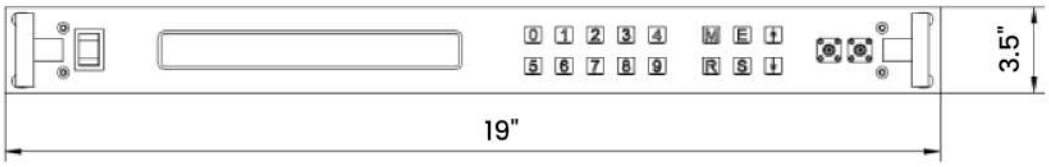
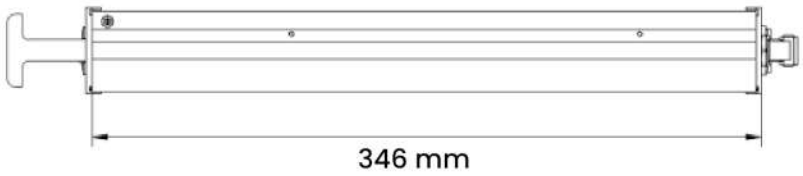
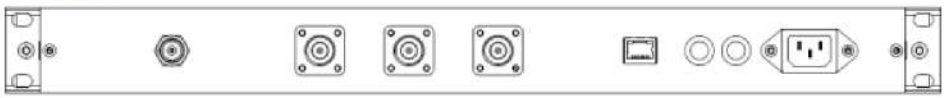
Drawings

front view



side view



rear view