

SATCOM TRANSMITTER

Down-Converter

Down-Converter DC3810



TYPICAL SPECIFICATIONS

[Frequency]

Input frequency	3400 to 4200 MHz
Output frequency	950 to 1750 MHz
LO frequency	5150MHz
Frequency sense	Inversion
Internal reference Signal frequency	10MHz (10MHz In presence of external ref signal, the unit shall lock to the external ref automatically)
Frequency stability	±1 ppb/day max @fixed temperature ±10 ppb/day max @0 to 50 °C

[RF input characteristics]

RF input level	-10dBm max
RF input connector	N-female (50 Ohms)
Input return loss	18dB min

[IF output characteristics]

IF output level	+15dBm min @P1dB
Spurious	-50dBc max @0dBm output -60dBm max without carrier
IF output connector	N-female (50 Ohms)
Output return loss	15dB min

[Transfer characteristics]

Gain	30dB min @0dB attenuation
Gain control	Δ20dB, 1dB step
Gain flatness	±1.5dB over full band ±0.5dB over 40MHz band
Gain stability	±0.5dB/day max @fixed temperature ±1.0dB max over temperature
Noise figure	15dB max @0dB attenuation
Phase noise (SSB)	-65dBc/Hz max @100Hz -75dBc/Hz max @1KHz -85dBc/Hz max @10KHz -90dBc/Hz max @100KHz

[Power]

Power requirement	230 VAC, 50 Hz Power on switch is provided
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[Mechanical & Environmental]

Physical size	1U, 19 inch rack mountable
Operating temp	0 to 50 °C

[Front/Rear panel]

Front panel indicator (LED)	Power status LO Lock status
Rear panel interface	AC Power Input IF input RF output External reference input (N-female) LAN for M&C (RJ-45)

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OUTLINE DRAWING AND INTERFACE

