

RADITEK

SATCOM
Ka Band LNB / PLL

Low Noise Block-Converter

Ka to L Band, N Female Connector,
Phase Locked, Externally Referenced



ELECTRICAL SPECIFICATIONS

SPECIFICATIONS	
RF Input Frequency	20.2 to 21.2GHz
IF Output Frequency	1000 to 2000MHz
Local Frequency	19.2GHz
Local Frequency Stability	Phase locked to external 10MHz reference
10MHz Reference	@ Multiplexed on the IF coaxial connector [Input level] -5 to +5dBm [Phase Noise] -135dBc/Hz max. @100Hz -148dBc/Hz max. @1KHz -152dBc/Hz max. @10KHz -155dBc/Hz max. @100KHz
Local Phase Noise	-62dBc/Hz max. @100Hz -72dBc/Hz max. @1KHz -82dBc/Hz max. @10KHz -92dBc/Hz max. @100KHz -102dBc/Hz max. @1MHz
Local Leakage	-60dBm max at waveguide flange.
Noise Figure	1.7dB @ +23°C
Gain	60dB ±4dB Over temp. and freq.
Gain Flatness	±2.0dB max. Over band
Gain Stability	±1.0dB max. Over 24hr at +25°C.
Input VSWR	1.3:1 max.
Output VSWR	1.8:1 max.
Image Rejection	-45dBc max.
P1dB	+15dBm min.
Spurious	The sum all spurious power shall be 20dB below the power of the thermal output noise in a 1000MHz BW.
Input DC Power	+15 to +24VDC, 400mA Multiplexed on a single coaxial connector with the IF and 10MHz reference signal.
Input Interface	WR-42 waveguide flange with O-ring and threaded screw holes.
Output Interface	50Ω, N-type female coaxial connector.
DC Current	400mA max.

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MECHANICAL SPECIFICATIONS

SPECIFICATIONS	
Size	(L)153mm x (W)77mm x (H)51mm
Weight	approx. 700g
Color	White, Munsel N9.5, semi gloss

ENVIRONMENTAL SPECIFICATIONS

SPECIFICATIONS	
Operating Temperature	-40 to +60°C
Operating Altitude	10,000 ft ASL
Operating Relative Humidity	100%, condensing
Non-operating Temperature	-50 to +70°C
Non-operating Altitude	50,000 ft. ASL
F Shock	20g, 11ms, half sine
Vibration	MIL-STD-810E, method 514-4

