

RADITEK

SATCOM IF to LBand UC

Up Converter IF- L Band
IF (70 or 140M) to LBand (950-1750M)
RUC-IF(70Mor140M) to LBand(950-1750M)-g11



Code-g11



The Raditek is a new, wideband cost effective series of 70MHz to L-Band Converters. Both transmit and receive chains have independent synthesizers. These converters can be configured using an intuitive menu tree from a LCD front panel. They are also equipped with optional L-Band auxiliary ports both on transmit and receive chains for integrated working with other L-Band systems. The Converters can also be configured and monitored remotely on a PC using an S232/RS422 interface. They provide 24VDC, a very stable and low phase noise reference of 10MHz for the BUC and a 15VDC and the reference for LNB. The BUC and LNB can be driven with cables up to 200ft. These converters come in a standard 19" Rack of 1 RU height.

Features

- Extremely cost competitive
- Independent TX/RX synthesizers
- Highly reliable
- Front panel control
- Remote control using PC
- Low spurious emission meeting EN standards
- Very high dynamic range both for transmit and receive chains
- Extremely stable reference oscillator
- Wide transmit frequency range from 950 to 1750MHz
- Wide receive frequency range from 950 to 1750MHz
- Operates over -10°C to +50°C

Quality Assurance

All Raditek BDCs are designed and manufactured according to ISO 9001 Standard.

Order Examples: RUC-IF(70Mor140M) to LBand(950-1750M)-g11

Description: Up Converter, IF(70-140)MHz) to L-Band (950-1750MHz)

Power Supply					
Input Voltage	100 to 240VAC 50/60Hz [-48VDC (Optional)]				
Environmental					
Operating temperature	-10°C to +50°C				
Relative Humidity	up to 95% (Non-condensing)				
Mechanical					
Dimension	Width	Height	Depth	Weight	Color
	19" Rack	1U (44mm)	330mm Including Connectors	5Kg	Grey
10MHz Internal Reference					
Frequency Stability	<±5 X 10 ⁻⁹				
Temperature Stability	<±3 X 10 ⁻⁸ over 0~50°C				
Aging	<±5 X 10 ⁻⁸ /year				
Phase Noise	@10 Hz <-115dBc/Hz		@1kHz <-150dBc/Hz		
	@100 Hz <-140dBc/Hz		@10kHz <-155dBc/Hz		

Up Converter IF-L Band IF (70 or 140M) to L (950-1750M)

Parameters		Specification
RF Input Frequency		70MHz \pm 18 MHz 140 \pm 18 MHz (Switch able)
RF output Frequency		950-1750MHz
IF Input Range		-5 to -25dBm Typical
Frequency Step size		500KHz
Reference Signal stability		10-7/year; 10-9/day
Spurious		<-65dBm Full band Carrier Unrelated <-55dBm Full band Carrier Related
Phase Noise	@100Hz	-60dBc/Hz
	@1KHz	-73dBc/Hz
	@10KHz	-83dBc/Hz
	@100KHz	-93dBc/Hz
Gain		20dB min at 35dBm Input
Gain Adjustment Range		20dB with 0.5dB
Gain Flatness		\pm 0.75dB in 36MHz Bandwidth \pm 1dB in 800MHz Bandwidth
Gain Stability		\pm 1dB
Output @P1dB		0dBm at maximum gain
Noise figure		20dBm nominal at maximum gain
Input/ Output Impedance		50 Ω
Input/ Output VSWR		1.50:1 Max
Input interface (IF)		BNC Type Female (other options available)
Output interface (IF)		N Female (other options available)
DC Voltage for BUC		+24DVC, 5A max; +48Vdc (Optional)
Option L band port		
RF Input Frequency		950-1750MHz
Gain		0 dB typical
Gain Flatness		\pm 2dB in 36MHz Bandwidth \pm 2dB in 36MHz Bandwidth
Gain Adjustment Range		20dB with 0.5dB step
Input interface		N Female (other options available)

Note: All specifications are subject to change without notice.