RADITEK

SATCOM

L-C Band BUC/SSPA

GaN BUC(Block Up Converter)/SSPA

L to C(5.85-6.425) Band
150/200W rated power,
10MHz External Reference

RoHS COMPLIANT

Complementing the other RADITEK super-efficient, smaller size, lighter and more powerful BUC series. This model offers significant higher power BUC size and weight reduction and at the same time substantially improves thermal efficiency, which leads to higher reliability and longer MTBF.

These C-Band Antenna mounted BUC's are powered by GaN technology 150W / 200W C-Band and weigh in at only 22 Lbs, This product family is the most powerful and feature rich for its size: up to 200W at saturated power. This BUC features best in class RF characteristics, RF sample port, true RMS power measurements, extensive monitor and control capabilities enabled via Ethernet, Serial and/or Analog Interfaces. These features make it ideal for both mobile and fixed VSAT applications.

Key Features

- **Extremely high power density-up to 200W Psat in 15.3"x8.7"x4.2"**
- **Superior RF performance:**
  - *** Phase noise 8-10dB better than IESS308/309**
  - *** Spurious below -60dBc**
  - *** Psat up to 55dBm.**
  - *** Wide dynamic range, Gain Control**
  - *** High linearity**
- **RF Overdrive Protection**
- **Available also in Various C Band frequency option**
- **Internal 10MHz reference option**
- **Output and Input True RMS detection**
- **Configuration via RS-232 serial console, packet protocol RS-485 - User friendly HTTP based GUI and SNMP**
- **Automated Level control (ALC) option**
- **Redundant ready–no external redundancy controller required**
- **-48VDC isolated power supply optional**
- **Field upgradable software**
- **Status LED**

Order Examples: RBUC-L-Ce-CPR137-150W-AC-ER10M-ODU-i13

Description: *(Block Up Converter/SSPA, L Band (950-1525MHz) N-Type Female IF Input Connector to Ce (5.85-6.725GHz),CPR137 Grooved RF Output Connector, 150 Watts, AC 90-265V 10MHz External Reference)*

Additional Options: Cs Standard, Cp Palapa, Ci Insat Options P-SU: 200W DC 48V.

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GAN-Block Up Converter, IF 950-1525MHz To C Band

Power 150-200W, 10MHz External Reference

Specifications.			150W Psat // 200W Psat	
RF Frequency Range-Available in/switched:			Cs Standard or C Extended(5.85-6.725GHz)	
			5.85-6.425GHz (other frequency options available)	
IF Frequency Range			950-1525MHz	
LO Frequency			4.9 GHz	
Conversion			Single Conversion; non-inverting	
Saturated Power			52dBm /(150W) Typ	**53dBm /(200W) Typ**
Linear Power			49dBm min	50dBm min
Conversion Gain			75dB min, 77dB typ	
Gain Flatness			±1dB typ ±1.5dB max over full band; ±0.5dB max over any 40MHz	
Gain Stability			±1.5dB over full temperature range	
Gain Stability over input power			3dB typ 4dB max from 10dB back off to rated power	
Gain Control			20dB min dynamic range	
External Reference Frequency			10MHz multiplexed with IF In	
External Reference, Required Phase Noise			-130dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100 kHz	
Up-Converter Phase Noise			-68dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz	
Linearity 2 tone IMD Spectral Re-growth			-25dBc at at P linear -30dBc for QPSK at 1.5 x symbol rate at P linear+1dB	
Noise Power Density		Transmit Band	-85dBm/Hz max	
		Receive Band	-150dBm/Hz max	
Output Spurious		Non-signal related	-60dBc	
		signal related	-55dBc	
Power	AC Voltage Range		90-265VAC 50-60Hz auto-ranging PFC	
	48V DC Voltage Range (optional)		40-72VDC Isolated	
	Power Consumption	at rated power	850W	**1000W**
		at 3dB back off	650W	**750W**
Mechanical	Size		15.375"x8.75"x4.25"(18.625"x8.750"x4.250"with output circulator)	
	Weight		26 lbs	
	Cooling		Forced Air	
Environmental	Operating temperature		-40°C to +55°C	
	Relative Humidity		Up to 100% condensing	
Interfaces	IF Input Connector		N-type female	
	RF Output		CPR137 grooved	
	RF Sample		N-type female	
	AC Power in		MS3112E-3P	
	M&C Interface-Serial, Analog and Ethernet		MS3112E14-19S	
	Redundant Interface		MS3112E14-19P	

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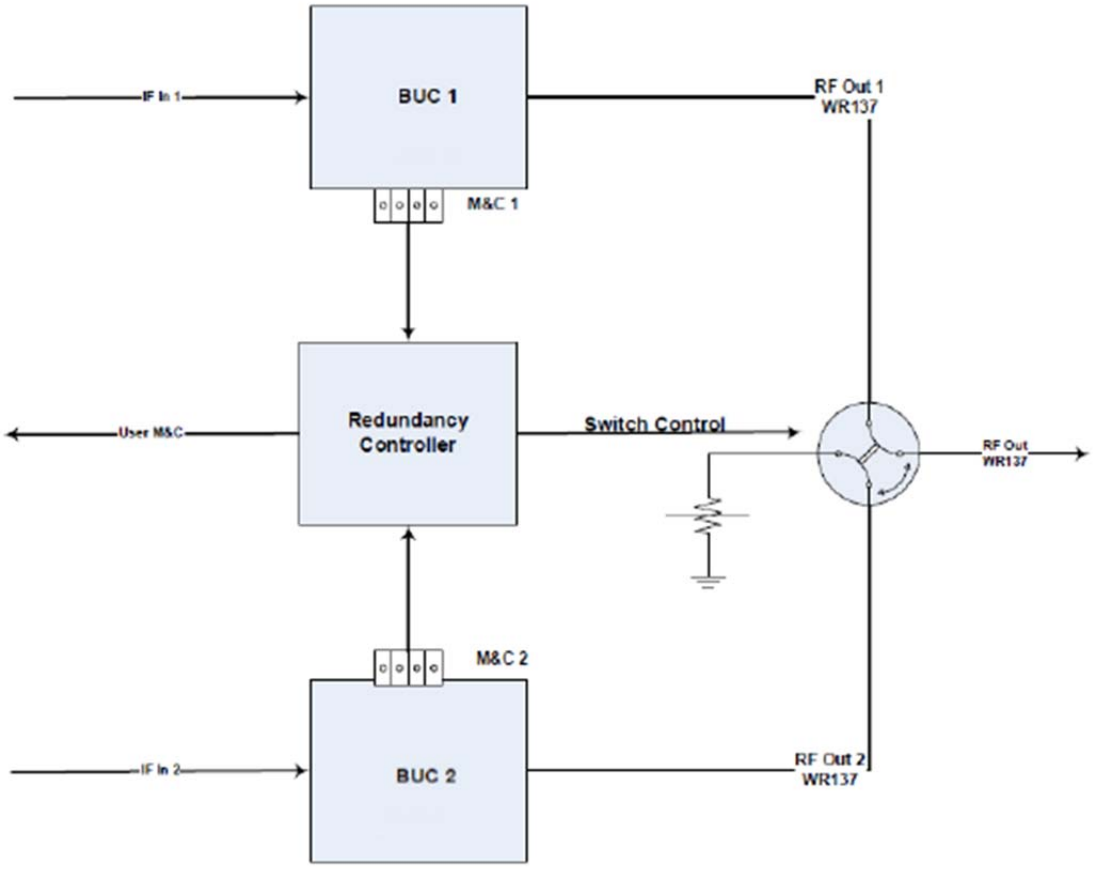
Power 150-200W, 10MHz External Reference

1:1 C-Band BUC Redundant System



Note 1. System IF input can be routed to an input splitter or coaxial switch (as a part of ganged WG switch) depending on system configuration.

Note 2. Stand by unit canbe running in hold over mode using internal low stability reference clock signal to provide "hot standby" operation in case of external reference being switched to the active unit only.

Note 3. Indoor RU Remoter control Panel can be added to the system as an option for customer convenience.

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