



C-Band **IBUC R**

Mid-High power multi-carrier BUC unit.



100W
to
400W

GaAs
Tech
Amplifier

3
Year
Warranty

The IBUC Advantage

All IBUCs are equipped with cutting-edge intelligent technology:

- Highest quality & exacting performance guaranteed through individual unit testing over temperature
- Superior linearity for maximum useable output power
- Amplifier overdrive protection
- User-selectable AGC/ALC for optimal performance & compatibility with modem adaptive coding
- New high capacity microprocessor & extended M&C functions

ULTIMATE MANAGEMENT & CONTROL

- » Local Web Interface & NMS-Friendly SNMP «
- » 70+ User Configurable Thresholds & Alarms «
- » Upgraded Event Log with 1,000 Sensor Readings «
- » Performance Trend Analysis Tools & Statistical logs «
- » Embedded Web Pages for Universal Web Browser Access «

Applications

The **IBUC R** is an integrated BUC/GaAs SSPA designed for higher performance & reliability. Block Upconverters based on GaAs amplifier technology deliver superior performance in terminals transmitting multiple carriers due to their inherent high linearity & minimal backoff requirements.

Multiple sensors & a new, high-capacity microprocessor provide tools to optimize terminal performance. The **IBUC R** is an excellent choice for higher power Satcom terminals in telecom, defense, maritime, broadcast, & other demanding applications.

Options

- 1+1 Transmit Redundancy
- High Stability Internal 10 MHz Reference with Auto-Detection
- Several Factory Select Bands
- Mounting Brackets
- Optional Type N or F-Type Input Connectors
- Handheld Terminal

C-Band IBUC 2				SSB Phase Noise		
Frequency Range	RF (MHz)	IF (MHz)		External Reference		IBUC 2
Sense		Inverting	Non-Inverting	10 Hz	-115 dBc/Hz	-54 dBc/Hz
Band 1 std C	5850 to 6425	950 to 1525	950 to 1525	100 Hz	-140 dBc/Hz	-79 dBc/Hz
Band 2 Palapa	6425 to 6725	975 to 1275	1125 to 1425	1 KHz	-150 dBc/Hz	-89 dBc/Hz
Band 3 INSAT	6725 to 7025	1150 to 1450	965 to 1265	10 KHz	-155 dBc/Hz	-94 dBc/Hz
Band 4 EXT C	5850 to 6650	950 to 1750	950 to 1750	100 KHz	N/A	-100 dBc/Hz
Band 5 Full C	5850 to 6725	975 to 1850	950 to 1825	1 MHz	N/A	-110 dBc/Hz
Input				External Reference (Multiplexed on TX IFL)		
VSWR/Impedance	1.5:1 max/ 50 Ohm			Frequency	10 MHz	
Input Connector	Type N Female (50 Ohm)			Level	-12 to +5 dBm	
Input Connector Options	Type F (75 Ohm), TNC (50 Ohm)			Internal Reference- Optional		
Input Power Detector Range	-55 to -20 dBm (80W - 200W) -50 to -15 dBm (400W)			Local Oscillator Frequency		
				Sense	Inverting	Non-Inverting
				Band 1	7375 MHz	4900 MHz
				Band 2	7700 MHz	5300 MHz
				Band 3	8175 MHz	5760 MHz
				Band 4	7600 MHz	4900 MHz
				Band 5	7700 MHz	4900 MHz
Gain				IBUC Power Supply		
Small Signal Gain (L-band to RF) with Attenuator Set to 0 dB				Voltage	DC	42 V min, 60 V max
100W	81 dB min				AC	100 to 240 VAC
125W	82 dB min					200 to 240 VAC
150W	83 dB min					100W, 125W
175W	83 dB min					150W to 400W
200W	84 dB min					
400W	82 dB min					
Attenuator Range	30 dB Variable in 0.1 dB Steps					
Gain Flatness						
Full Band	4 dB p-p max					
36 MHz	1.5 dB p-p max					
1 MHz	0.25 dB p-p max					
Gain Variation Over Temperature	Bands 1/2/3	Bands 4/5				
	Open Loop	3 dB p-p max				
	With AGC	1 dB p-p max				
RF Output						
	Interface	CPR-137G				
	VSWR	1.3:1 max				
Rated Output Power	P1dB					
100W	+50 dBm min					
125W	+51 dBm min					
150W	+51.8 dBm min					
175W	+52.4 dBm min					
200W	+53 dBm min					
400W	+56 dBm min					
Note: Output Power in Bands 4 & 5 is reduced by 0.5 dB.						
IMD3 (2 Carriers, 3 dB TOBO)		-26 dBc max (80W-200W) -25 dBc max (400W)				
Level Stability with ALC		± 0.5 dB				
Output Power Detector Range		Rated Power to -20 dB				
Power Reading Accuracy		± 1.0 dB max				
Spurious						
	In Band	-70 dBc				
	Out Band	Complies with EN 301 443 & MIL-STD 188-164B.				
Harmonics	-50 dBc max.					
Output Noise Power Density	TX <- 74 dBm/Hz					
	RX <- 145 dBm/Hz					
				Mechanical		
				100W-200W	DC Powered	AC Powered
					16.2 x 10 x 7.4 in. 411 x 254 x 188 mm.	16.2 x 10 x 7.6 in. 411 x 254 x 193 mm.
					32 lbs 14.5 kgs	33 lbs 14.9 kgs
				400W	N/A	29 x 15 x 10.1 in 737 x 381 x 257 mm.
				(Dimensions not including isolators for 100W to 200W models)		
						83 lbs 37.6 kgs
				Updated 9/21/2020		

Questions? Contact Us

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