

IBUC Advantages

Integrated BUC/SSPA for higher performance and reliability.

DC power can be supplied via IFL coax or separate DC connector for 5W through 25 W models.

All models available with integral AC power supply or separate DC power supply.

Guaranteed rated output power across the entire operating temperature range and frequency band.

Low phase noise exceeds IESS308/309 requirements by a minimum of 10 dB.

Embedded Web pages provide management for small networks using any Web browser.

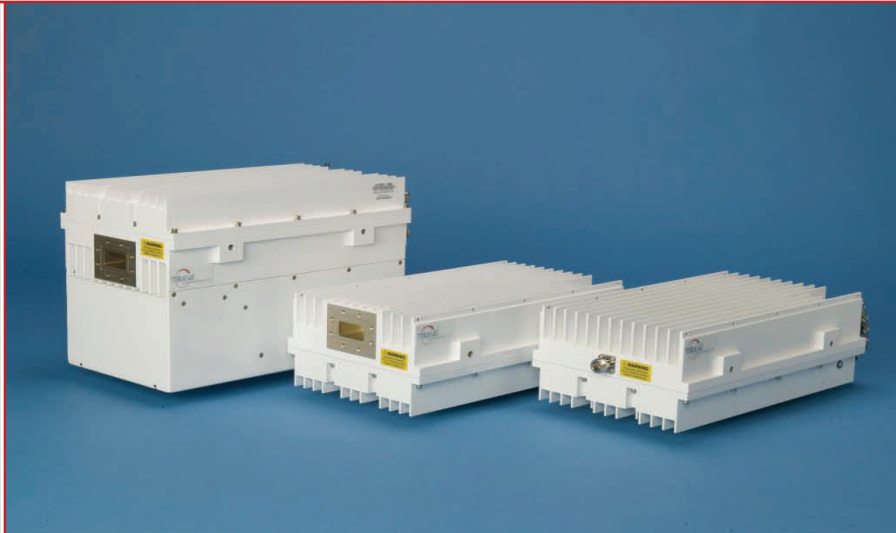
AGC or ALC circuits hold gain or output level constant.

16 dB User-adjustable gain in 0.1 dB steps preserves modem dynamic range.

Advanced customer interfaces:

- TCP/IP HTTP with embedded Web pages
- SNMP
- TELNET through TCP/IP
- FSK through TX IFL cable
- RS232/485 serial port
- Hand-held terminal

1+1 switching logic built into IBUC eliminates expensive external controller.



The revolutionary **IBUC** has advanced features to take your network to new heights.

IBUC offers significant benefits:

- Low terminal cost
- Simple design and installation
- Superior RF performance
- Simplified 1+1 configuration

New interfaces connect you to the **IBUC**'s extensive M&C facilities for network management or local access. This powerful new M&C enables:

- **Trouble-free commissioning** with easy, point-and-click installation/configuration
- Continuous **verification** of performance with alarm history
- Simplified **troubleshooting** of terminal faults

The **IBUC** comes with a complete set of diagnostic tools including:

- 10 MHz input detector
- Input voltage and current monitoring
- Transmit L-band input level detector
- Transmit RF output level detector
- Alarm history

Unique to the **IBUC** are internal AGC and ALC functions that satisfy demanding applications with stringent specifications.

For additional information contact Terrasat Sales at +1 408-782-5911 or by Email: Sales@Terrasatinc.com.

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C-Band IBUC Block Upconverter Specifications

L-Band Input		SSB Phase Noise	External reference	IBUC
Frequency range		10Hz	-120 dBc/Hz	-35 dBc/Hz
Band 1	950 to 1525 MHz	100Hz	-130 dBc/Hz	-70 dBc/Hz
Band 2	975 to 1275 MHz	1 kHz	-143 dBc/Hz	-80 dBc/Hz
Band 3	1150 to 1450 MHz	10 kHz	-152 dBc/Hz	-90 dBc/Hz
Band 4	950 to 1750 MHz	100kHz	-155 dBc/Hz	-100 dBc/Hz
Band 5	975 to 1850 MHz	1MHz	-155 dBc/Hz	-110 dBc/Hz
VSWR / Impedance	1.5:1 max / 50 ohms	External Reference (multiplexed on TX IFL)		
Connector	Type N female	Frequency	10 MHz	
Input power detector range	-55 to -20 dBm	Level	-12 to +5 dBm	
Gain		Local Oscillator		
Small Signal Gain (L-band to RF) with attenuator set to 0 dB		LO Frequency		
5 W	68 dB min	Band 1	7375 MHz	
10 W	71 dB min	Band 2	7700 MHz	
20 W	74 dB min	Band 3	8175 MHz	
25 W	75 dB min	Band 4	7600 MHz	
40 W	77 dB min	Band 5	7700 MHz	
50 W	78 dB min	Sense	Inverting	
60 W	79 dB min	IBUC Power Supply		
80 W	80 dB min	Voltage / Current	100 to 240 VAC or 48 ± 11 VDC	
Attenuator range	16 dB variable in 0.1 dB steps			
Gain flatness	5 W to 50 W	60 W to 80 W & Band 4&5	Power Consumption	
Full band	3 dB p-p max	4dB p-p max	5 W	72 W
36 MHz	1dB p-p max	1 dB p-p max	10 W	96 W
1 MHz	0.25 dB p-p	0.25 dB p-p	20 W	154 W
Gain variation over temperature			25 W	168 W
Open loop	3 dB p-p max	4 dB p-p max	40 W	330 W
With AGC	1 dB p-p max	1 dB p-p max	50 W	360 W
RF Output		Frequency range	60 W	432 W
Band 1 Standard C-Band	5850 to 6425 MHz			
Band 2 Palapa/ST-1	6425 to 6725 MHz			
Band 3 Insat	6725 to 7025 MHz			
Band 4 Extended C-Band	5850 to 6650 MHz			
Band 5 Full C-Band	5850 to 6725 MHz			
Interface	CPR-137G or N-f			
VSWR	1.5:1 max			
Rated output power (P1dB across temperature range and frequency band)			80 W	552 W
5 W	+37 dBm min			
10 W	+40 dBm min			
20 W	+43 dBm min			
25 W	+44 dBm min			
40 W	+46 dBm min			
50 W	+47 dBm min			
60 W	+47.8 dBm min			
80 W	+49 dBm min			
Note: For 40 W and above, output power in bands 4 & 5 is reduced by 0.5 dB				
IMD3 (2 carriers, 30 kHz apart, 9dB BO/carrier)	-32 dBc max			
Level stability with ALC	± 0.5 dB			
Output power detector range	Rated power to -20 dB			
Power reading accuracy	± 1.0 dB max.			
Spurious	Complies with EN 301 443			
Harmonics	-50 dBc max.			
Monitor and Control		Hand-held Terminal		
FSK (multiplexed on TX IFL)		TCP / IP	Telnet, HTTP	
RS232/485		UDP	SNMP	
Environmental		5 W to 40 W	50W to 80W	
Operating temperature	-40 °C to +60 °C	-40 °C to +55 °C		
Relative humidity	100% condensing			
Altitude	10,000 ft., (3,000 m) ASL			
Mechanical		Size	Weight	
5 W, 10 W	12.2"(L) x 7.2"(W) x 4.2"(H)		13 lbs	
	310 mm x 183 mm x 107 mm		5.8 kg	
20 W to 80 W	12.2"(L) x 7.2"(W) x 7"(H)		18 lbs	
	310 mm x 183 mm x 178 mm		8 kg	



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Specifications are subject to change without notice

C-Band IBUC Data Sheet 07/31/09