



DBS-Band IBUC Intelligent Block Upconverter

IBUC Advantages

Integrated BUC/SSPA for higher performance and reliability.

DC power can be supplied via IFL coax or separate DC connector for 5 W through 8 W models.

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

Internal 10MHz reference option automatically switches to internal reference when external reference is not available.

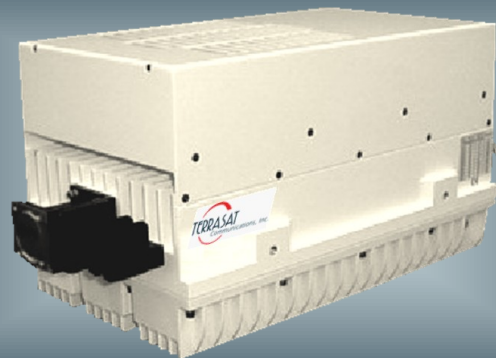
Embedded Web pages provide management for small networks using any Web browser.

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 user 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



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 time-stamped 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
- User configurable thresholds and alarms

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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DBS-Band IBUC Block Upconverter

Frequency range	RF	IF	SSB Phase Noise	External reference	IBUC
Band 1	17.3 to 18.1 GHz	950 to 1750 MHz	10 Hz	-120 dBc/Hz	-32 dBc/Hz
Band 2	18.1 to 18.4 GHz	1150 to 1450 MHz	100 Hz	-130 dBc/Hz	-62 dBc/Hz
			1 kHz	-143 dBc/Hz	-72 dBc/Hz
VSWR / Impedance	1.5:1 max / 50 Ohm		10 kHz	-152 dBc/Hz	-82 dBc/Hz
Connector	Type N female (50 Ohm)		100 kHz	-155 dBc/Hz	-92 dBc/Hz
Connector options	Type F (75 Ohm), TNC (50 Ohm)		1 MHz	-155 dBc/Hz	-110 dBc/Hz
Input power detector	-55 to -20 dBm				

Gain

Small Signal Gain (L-band to RF) with attenuator set to 0 dB

5 W	68 dB min
8 W	70 dB min
10W	71 dB min
16 W	73 dB min
20 W	74 dB min
25 W	75 dB min
Attenuator range	16 dB variable in 0.1 dB steps

Gain flatness

Full band	3 dB p-p max
36 MHz	1 dB p-p max
1 MHz	0.25 dB p-p

Gain variation over temperature

Open loop	3 dB p-p max
With AGC	1 dB p-p max

RF Output

Interface WR62 UG cover with groove

VSWR 1.5:1 max

Rated output power (P1dB)

5 W	+37 dBm min
8 W	+39 dBm min
10 W	+40 dBm min
16 W	+42 dBm min
20 W	+43 dBm min
25 W	+44 dBm min

IMD3 (2 carriers, 3 dB TOBO) -23 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 In Band -50 dBc max.

Harmonics -50 dBc max.

Output Noise Power Density

TX < -85 dBm/Hz

RX < -150 dBm/Hz

External Reference (multiplexed on TX IFL)

Frequency	10 MHz
Level	-12 to +5 dBm
Internal Reference - optional	

Local Oscillator Frequency

Band 1	16350 MHz
Band 2	16950 MHz
Sense	Non-Inverting

IBUC Power Supply

	DC	AC
Voltage	48 \pm 11 VDC	100 to 240 VAC
DC via coax available on 5 W and 8 W		

Power Consumption

5 W	120 W	150 VA
8 W	168 W	185 VA
10 W	192 W	220 VA
16 W	220 W	250 VA
20 W	250 W	280 VA
25 W	280 W	320 VA

Monitor and Control

FSK (multiplexed on TX IFL), **RS232/485**

Hand-held Terminal, TCP / IP (HTTP, Telnet, SNMP)

Environmental

Operating temperature	-40°C to +55°C
Relative humidity	100% condensing
Altitude	10,000 ft., (3,000 m) ASL

Mechanical

	DC powered	AC powered
5 W	12.2x7.2x4.2 in. 13 lbs	12.2x7.2x4.5 in. 14 lbs
8 W - 25 W	12.2x7.2x6.2 in. 18 lbs	12.2x7.2x6.5 in. 19 lbs

Specifications are subject to change without notice.

DBS-Band IBUC Data Sheet 09/21/10



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