

IBUC Advantages

Integrated BUC/SSPA packaging for higher performance and reliability.

NMS-friendly interfaces enable remote management of your earth station RF.

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

AGC or ALC circuits hold gain or output level constant.

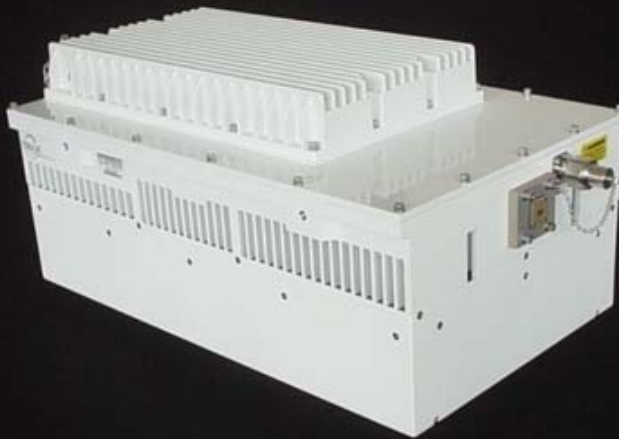
16dB User-adjustable gain in 0.1 dB steps preserves modem dynamic range.

Advanced customer interfaces:

- TCP/IP HTTP with embedded web pages.
- SNMP
- TELNET through TCP/IP
- FSK through TX IFL cable.
- RS232/485 serial port.
- Handheld terminal

1+1 switching logic and drivers built into the IBUC eliminate expensive external switching controller.

Extensive diagnostics displayed as web pages for faster setup and troubleshooting.



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

Ka-Band IBUC Block Upconverter Specifications

L-Band Input

	Frequency range
Band 1	950 to 1950 MHz
Band 2	1000 to 2000 MHz
VSWR/Impedance	1.5:1 max / 50 ohms
Connector	Type N female
Input power detector	-55 to -20 dBm

Gain

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

40W	77 dB min.
Attenuator range	16 dB in 0.1dB steps
Gain flatness	
Full band	5 dB p-p max
36 MHz	1.5 dB p-p max
1 MHz	0.5 dB p-p
Gain variation over temperature	
Open loop	4 dB p-p max
With AGC	1.5 dB p-p max

RF Output

Frequency range	30.00 to 31.00 GHz
Interface	WR28 UG cover w/ groove
VSWR	1.5:1 max
Rated output power (P1dB)	
40W	+46 dBm min.
IMD3 (2 carriers, 3dB total BO)	-24 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	-60 dBc at rated power
Output Power Sample	-40dBc

SSB Phase Noise

Offset	External Reference	IBUC
10 Hz	-120 dBc/Hz	-32 dBc/Hz
100 Hz	-130 dBc/Hz	-62 dBc/Hz
1 kHz	-143 dBc/Hz	-72 dBc/Hz
10 kHz	-152 dBc/Hz	-82 dBc/Hz
100 kHz	-155 dBc/Hz	-92 dBc/Hz
1 MHz	-155 dBc/Hz	-102dBc/Hz

External Reference (multiplexed on TX IFL)

Frequency	10 MHz
Level	-12 to +5 dBm

Local Oscillator

	LO Frequency
Band 1	29050 MHz
Band 2	29000 MHz
Sense	Non-inverting

Power Requirement 100-240VAC, 47-63Hz
750W

Connector, AC Amphenol
C016 20C003 100 12

Monitor and Control

RS232/485	
Handheld Terminal	
TCP / IP	Telnet, HTTP
UDP	SNMP

Environmental

Operating temperature	-40°C to +65°C
Relative humidity	100% condensing
Altitude	10,000 ft (3,000m) ASL

Mechanical

16.2"(L)10"(W)x7.6"(H)	32 lbs.
412mm x 254mm x 193mm	14.5 kg

Specifications are subject to change without notice



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