

## 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
- Weatherized RJ45 Ethernet interface for simplified connection

### 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 «



## Ku-Band IBUC 3

Compact Size Without the Compromise

8W  
to  
16W

GaAs  
Tech  
Amplifier

3  
Year  
Warranty

## Applications

Specially designed for mobility, the IBUC 3 is a full-featured IBUC in a new, smaller & lighter package. An excellent fit with very small aperture or flat panel antennas where size & weight are key considerations.

Yet, all of the IBUC performance & manageability advantages remain. The included web interface enables terminal optimization during installation & provides a suite of trouble-shooting tools. An auto-ranging DC power supply is accessed via external power connector or IFL cable.

### Options

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

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## Ku-Band IBUC 3

Frequency Range	RF	IF
Band 1 Std Ku	14.00 to 14.50 GHz	950 to 1450 MHz
Band 2 Full Ku	13.75 to 14.50 GHz	950 to 1700 MHz

### Input

VSWR/ Impedance	1.5:1 / 50 Ohm
Input Connector	Type N Female (50 Ohm)
Input Connector Options	Type F (75 Ohm), TNC (50 Ohm)
Input Power Detector Range	-55 to -20 dBm

### Gain

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

8W	70 dB min
16W	73 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

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

### RF Output

Interface	WR75 Cover with Groove
VSWR	1.5:1 max
Rated Output Power	$P_{1dB}$
8W	+39 dBm min
16W	+42 dBm min

IMD3 (2 Carriers, 3dB TOBO) -25 dBc max

Level Stability with ALC  $\pm 0.5$  dB

Output Power Detector Range Rated Power to -20 dB

Power Reading Accuracy  $\pm 1.0$  dB max.

Spurious

In Band -65 dBc

Out of Band Complies with EN 301 428/430 & MIL-STD 188-164B

Harmonics -50 dBc max.

Output Noise Power Density

Tx < - 83 dBm/Hz

Rx < - 145 dBm/Hz

### SSB Phase Noise

SSB Phase Noise	External Reference	IBUC 3
10 Hz	-125 dBc/Hz	-50 dBc/Hz
100 Hz	-145 dBc/Hz	-65 dBc/Hz
1 KHz	-160 dBc/Hz	-80 dBc/Hz
10 KHz	-165 dBc/Hz	-85 dBc/Hz
100 KHz	N/A	-90 dBc/Hz
1 MHz	N/A	-115 dBc/Hz

### External Reference (Multiplexed on TX IFL)

Frequency & Level 10 MHz -12 to +5 dBm

Internal Reference - Optional

### Local Oscillator Frequency

Sense	Non-Inverting
Band 1	13050 MHz
Band 2	12800 MHz

### IBUC Power Supply

Voltage	8W	20 to 36 VDC or 38 to 76 VDC
	16W	38 to 76 VDC
DC via coax available on 8W-16W		

Power Consumption

8W	70 W
16W	135 W

### Monitor & Control

Ethernet (HTTP, Telnet, SNMP) via RJ45 Connector

RS232/485, Handheld Terminal via MS-Type Connector

FSK multiplexed on TX IFL

### Environmental

Operating Temperature	-40°C to +60°C
Relative Humidity	100% Condensing
Altitude	10,000 ft (3,000 m) ASL

### Mechanical

7 x 5 x 4 in.  
178 x 127 x 102 mm.

5.6 lbs

2.5 kgs