

Designs and manufactures innovative RF solutions for Satellite Communications.

- Founded in 1994
- 11,000 sq. ft. engineering and manufacturing facility



- Located in Morgan Hill, CA (southern Silicon Valley)



IBUC –

The INTELLIGENT BLOCK UPCONVERTER

Intelligent

Integrated

Innovative

In a class of its own



Applications

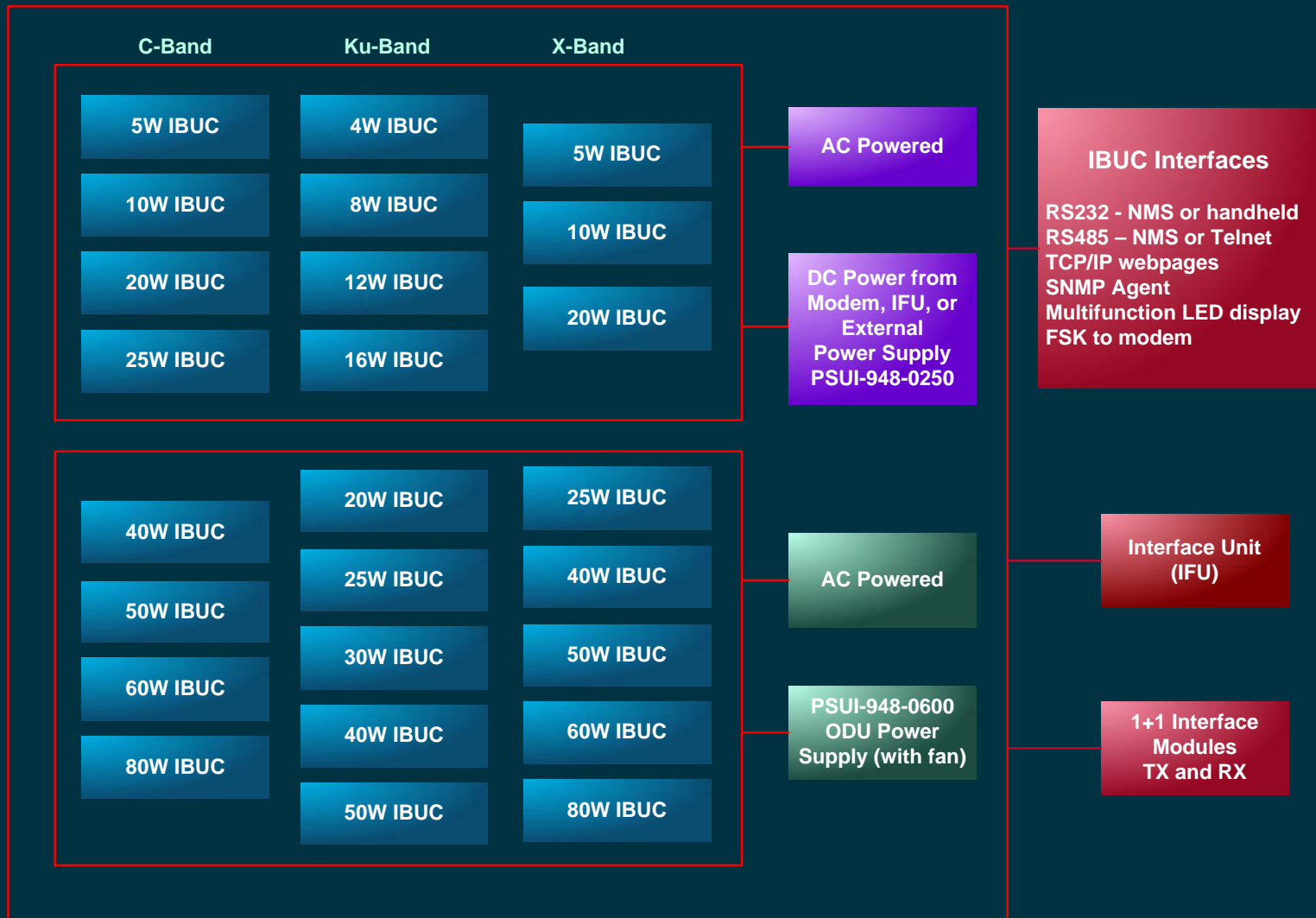
- GSM Backhaul
- Oil & Gas
- SNG
- Broadcast
- Private Networks
- Emergency Mobile
 - First Responders
 - Infrastructure Restoral
- Transportable Terminals
 - Deployable terminals
 - Maritime
 - Comm-on-the -move



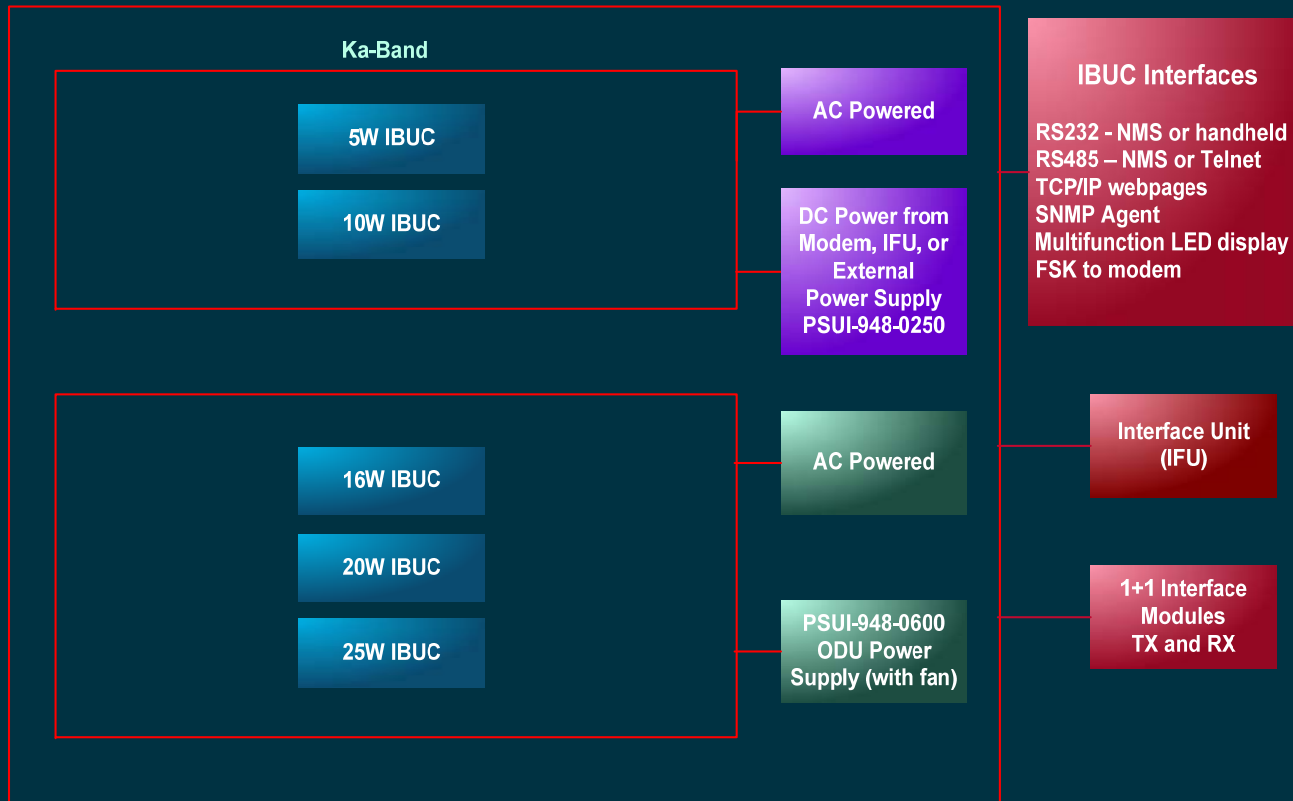
Applications



IBUC Product Family

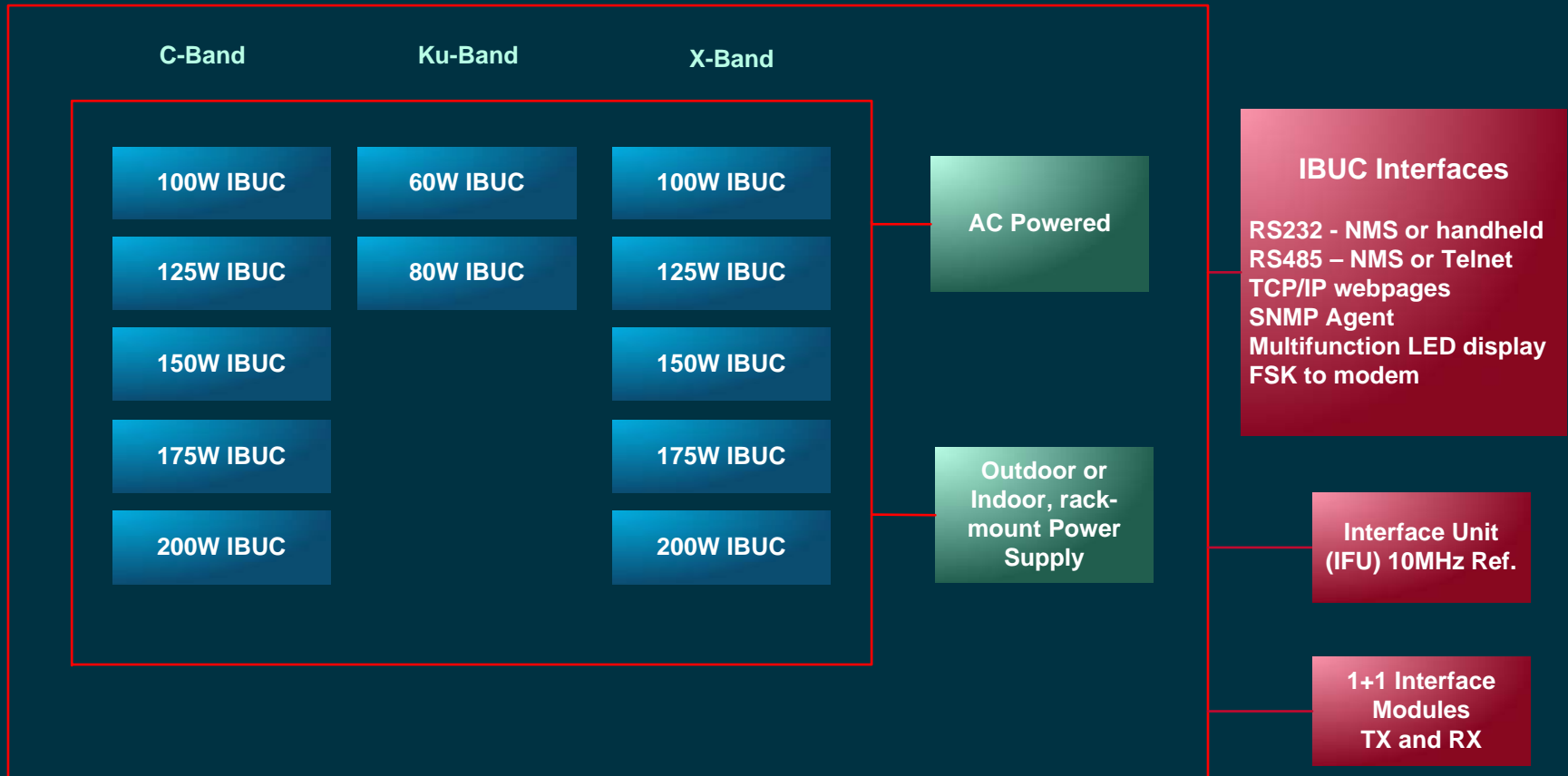


IBUC Product Family



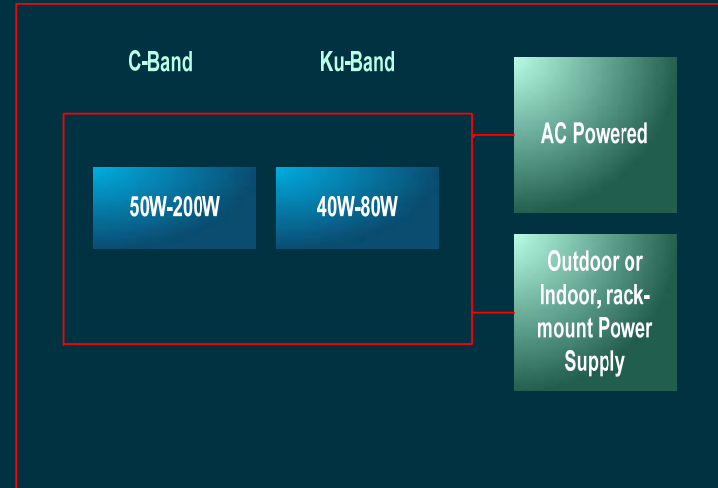
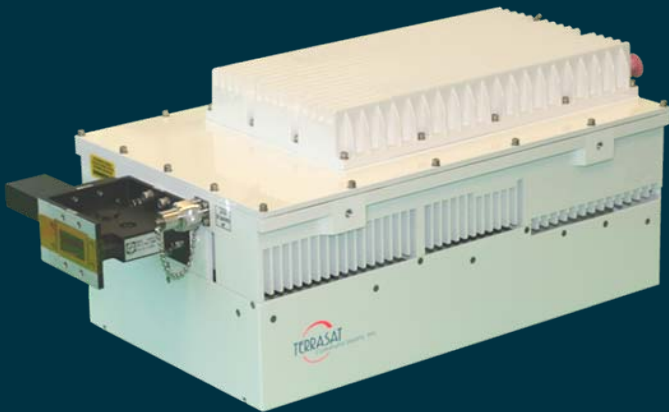
IBUC Product Family

High Power



C-Band	X-Band	Ku-Band	Ka-Band	Frequency Bands
Band 1 5850-6425 MHz	7900-8400 MHz	Band 1 14.00-14.50 GHz	Band 1 29.5-30.0 GHz	
Band 2 6425-6725 MHz		Band 2 13.75-14.50 GHz	Band 2 30.0-31.0 GHz	
Band 3 6725-7025 MHz		Low Ku 12.75-13.25 GHz		
Band 4 5850-6650 MHz				
Band 5 5850-6725 MHz				

SSPA Product Family



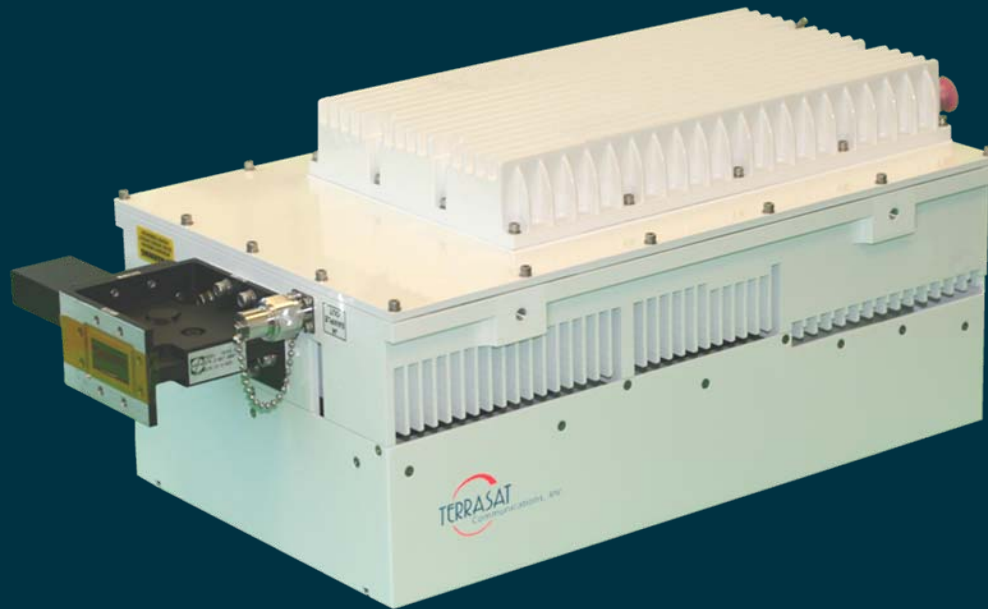
C-band IBUCs

5W - 80W, Standard and extended bands



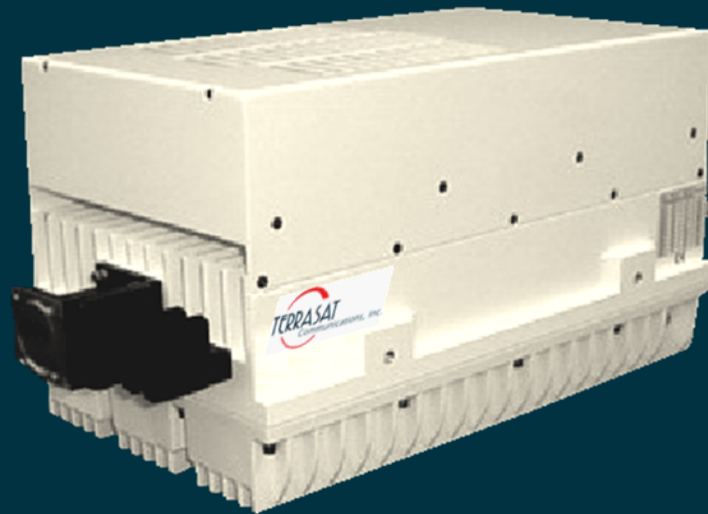
C-band High Power IBUCs

100W - 200W



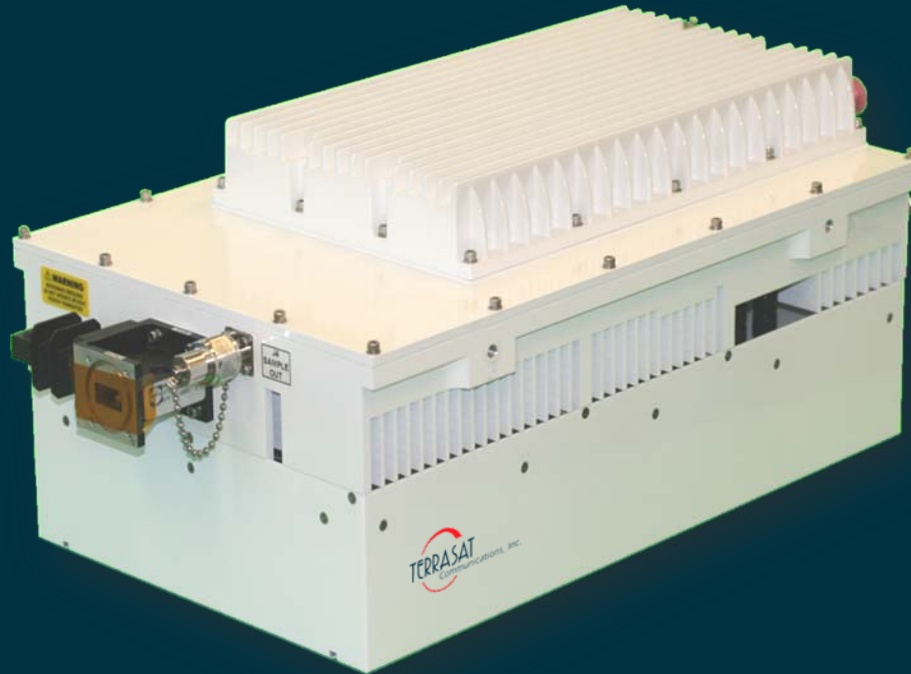
Ku-band IBUCs

4W- 50W, Standard band and wide band



Ku-band High Power IBUCs

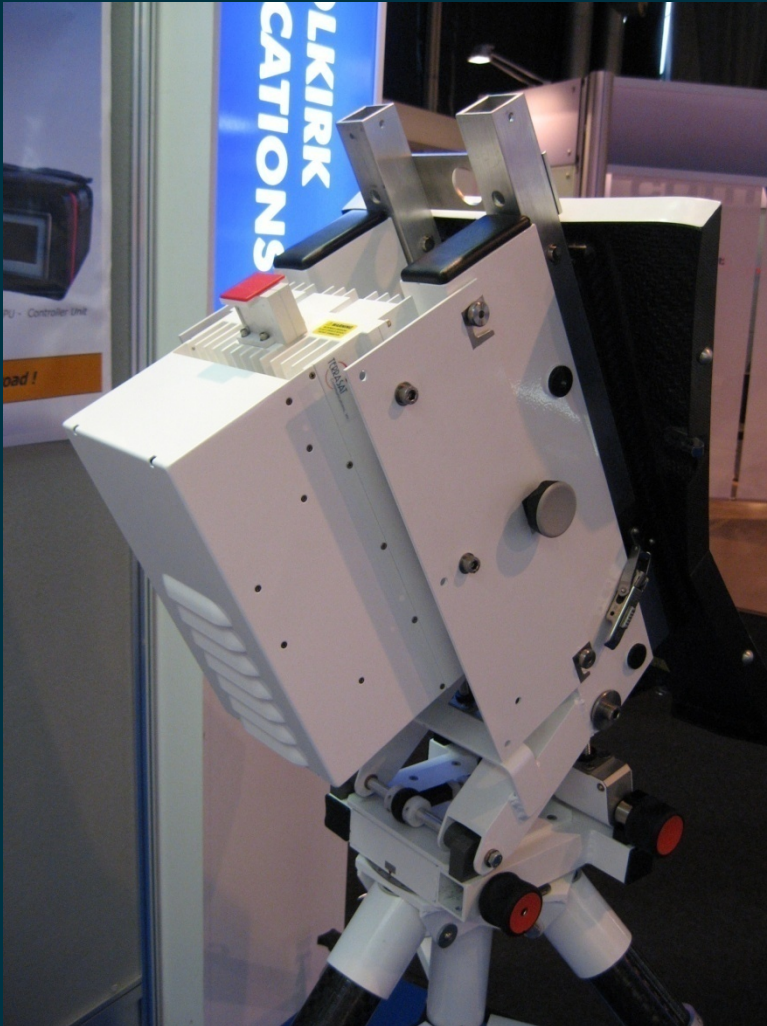
60W - 80W



X-band IBUCs

5W - 200W

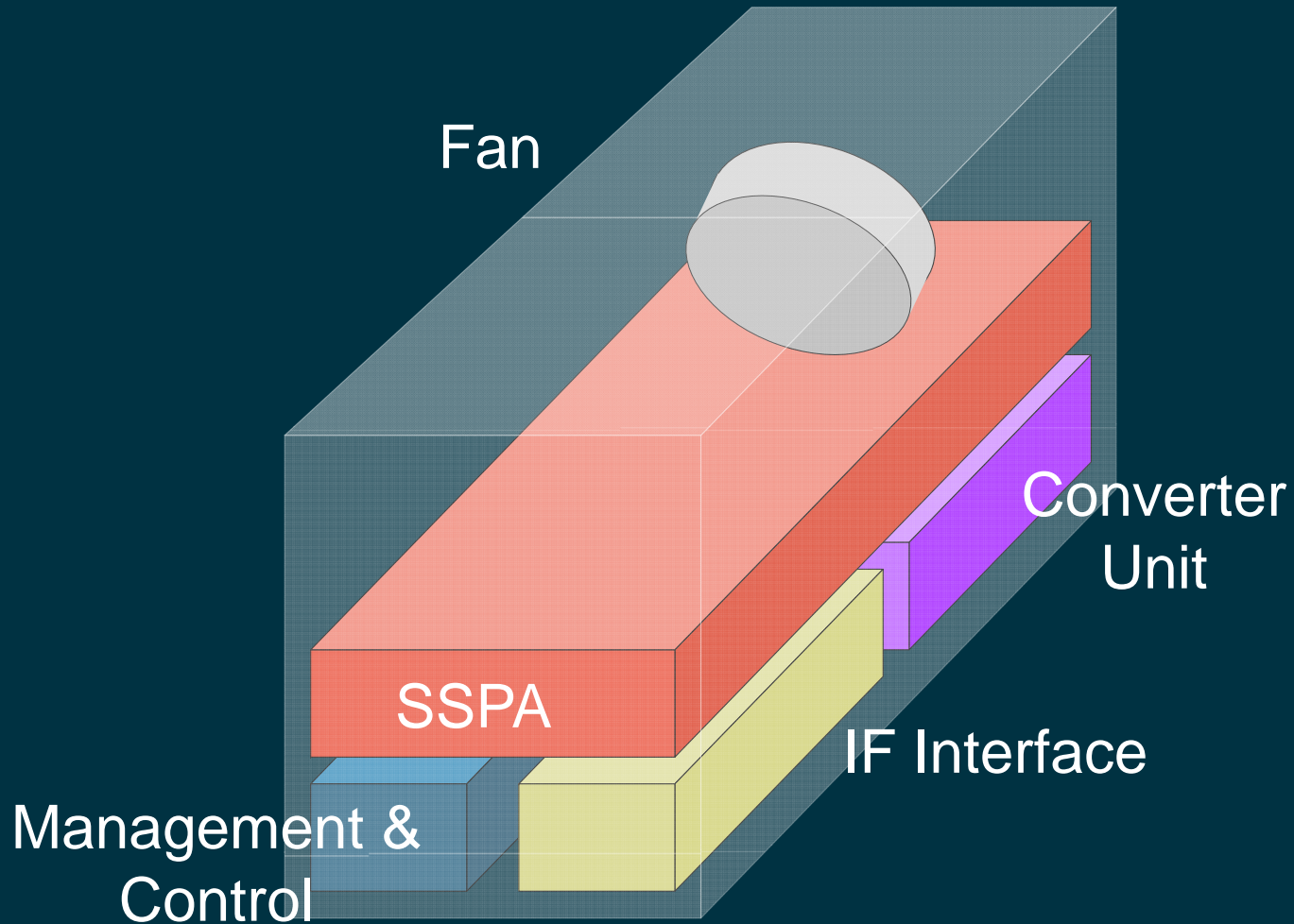




Terrasat Advantages

- Integrated BUC/SSPA package
 - saves space, saves money, improves performance
 - full array of frequency bands available

IBUC Integrated Package



Terrasat Specifications

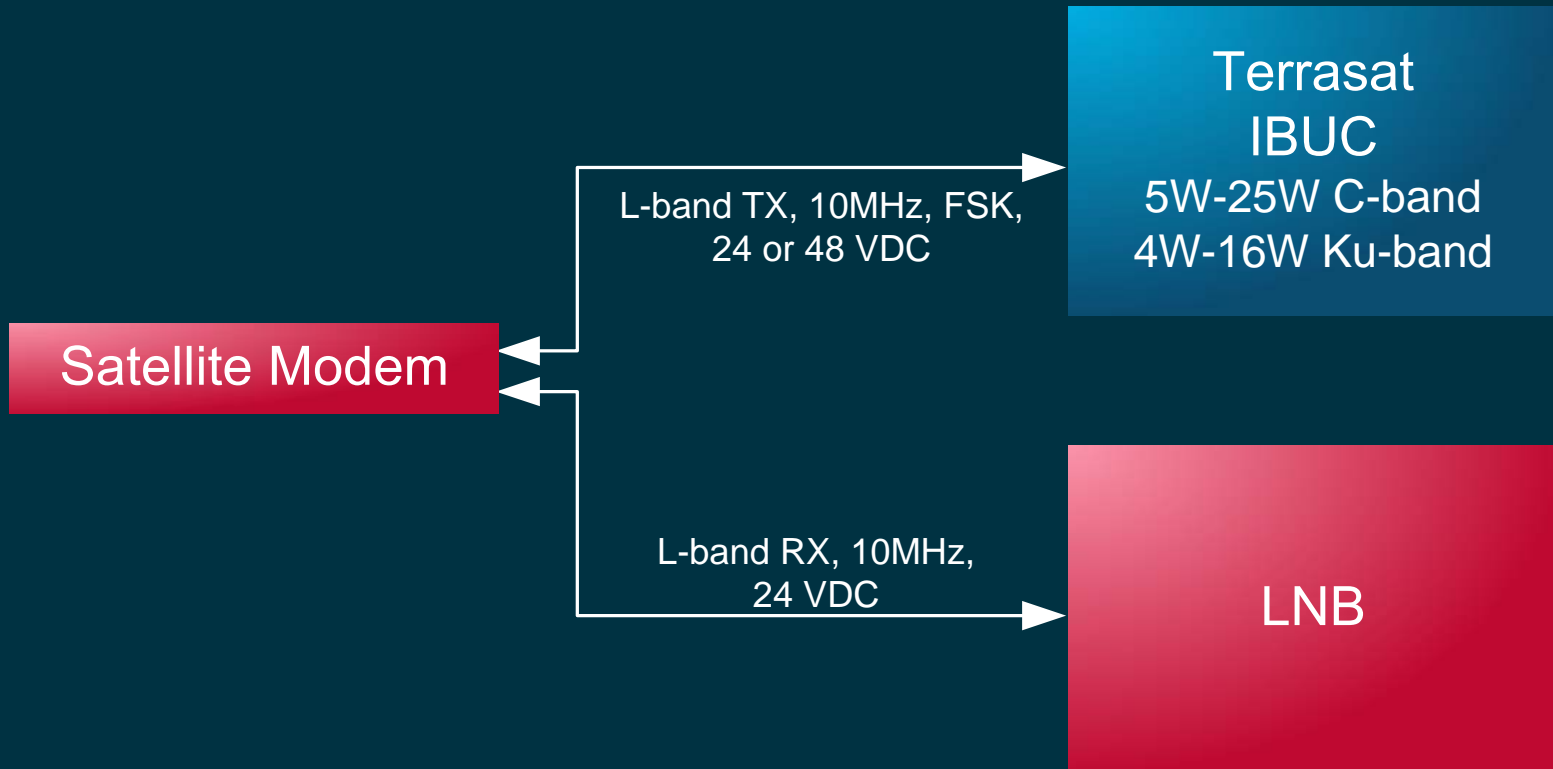
- Best linearity performance in the market
- P1dB power guaranteed across temp and freq specs
 - gain variation 1dB with AGC
- Superior phase noise
 - 10dB below IESS308/309

Terrasat Advantages

- Small, compact packaging
 - 50W Ku and 80W C/X 310x183x214 mm
- Choice of power supply
 - Power from modem or external, field-replaceable power supply
 - Internal AC powered

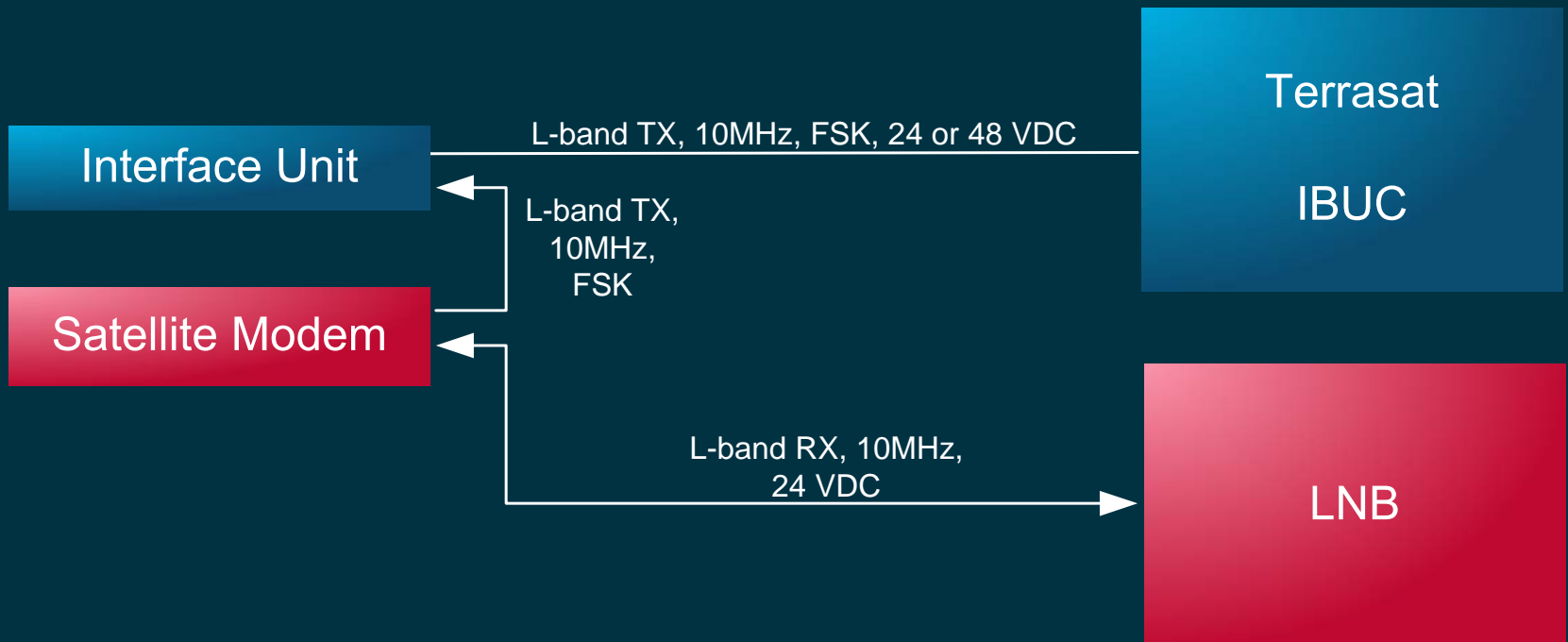
Indoor Equipment

Outdoor Equipment



Indoor Equipment

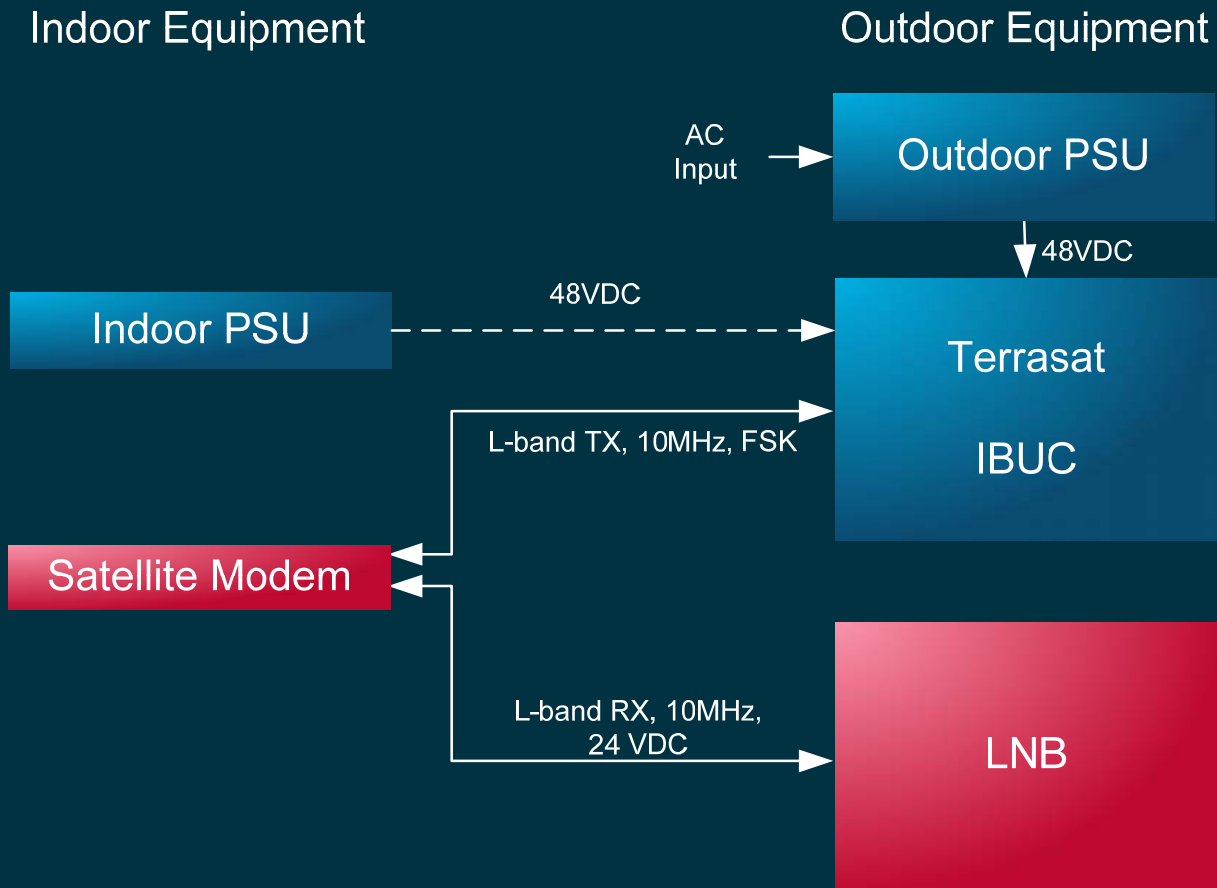
Outdoor Equipment



Interface Unit

multiplexes DC and 10 MHz for BUC and LNB





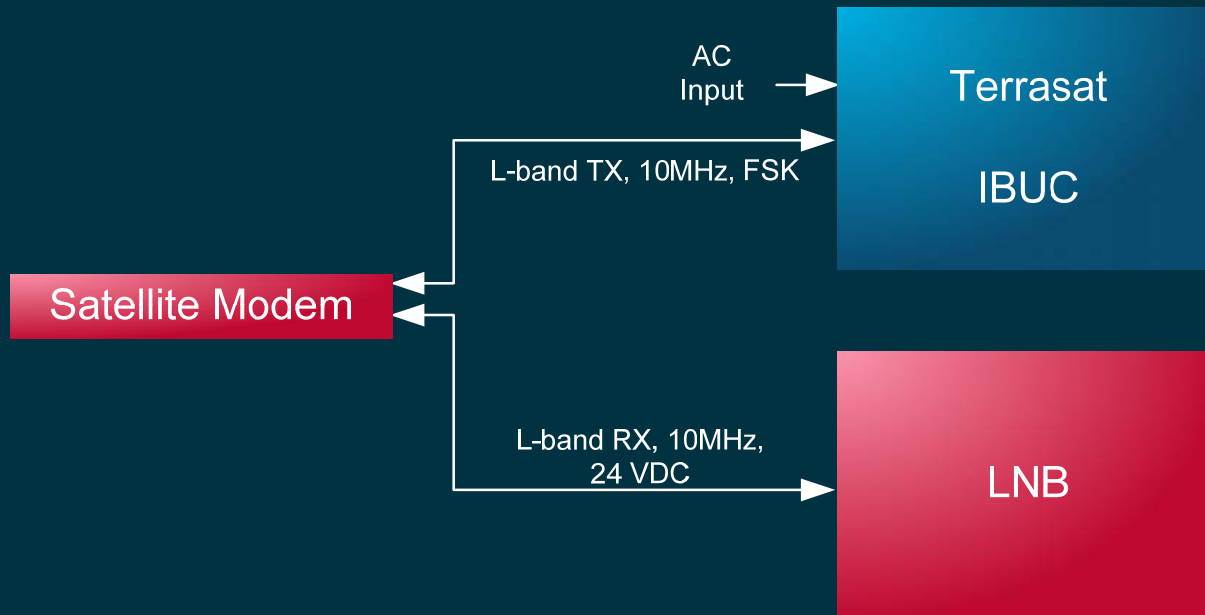
Power Supplies

A full range of indoor and outdoor AC/DC power supplies for the IBUC product line.



Indoor Equipment

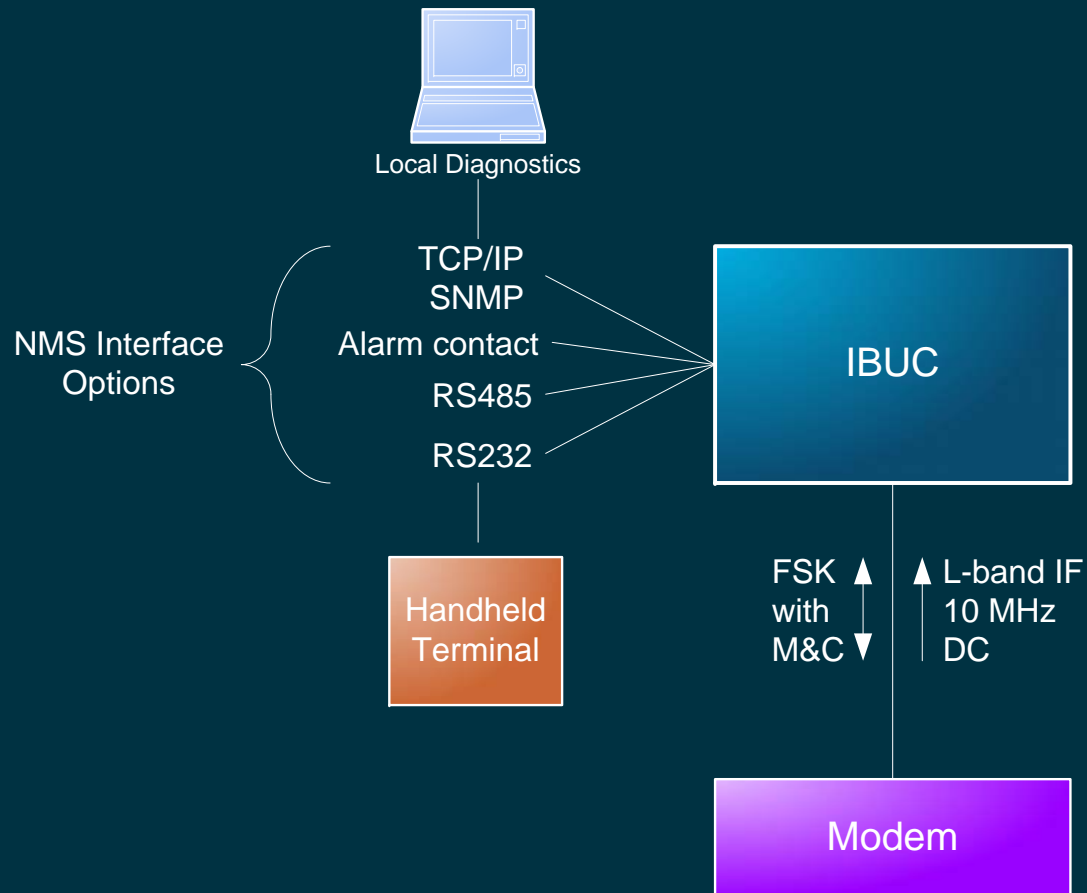
Outdoor Equipment



Terrasat M&C

- Advanced M&C features
 - Multiple interfaces
 - AGC and ALC for precise gain or output level control
 - User adjustable gain (16dB)

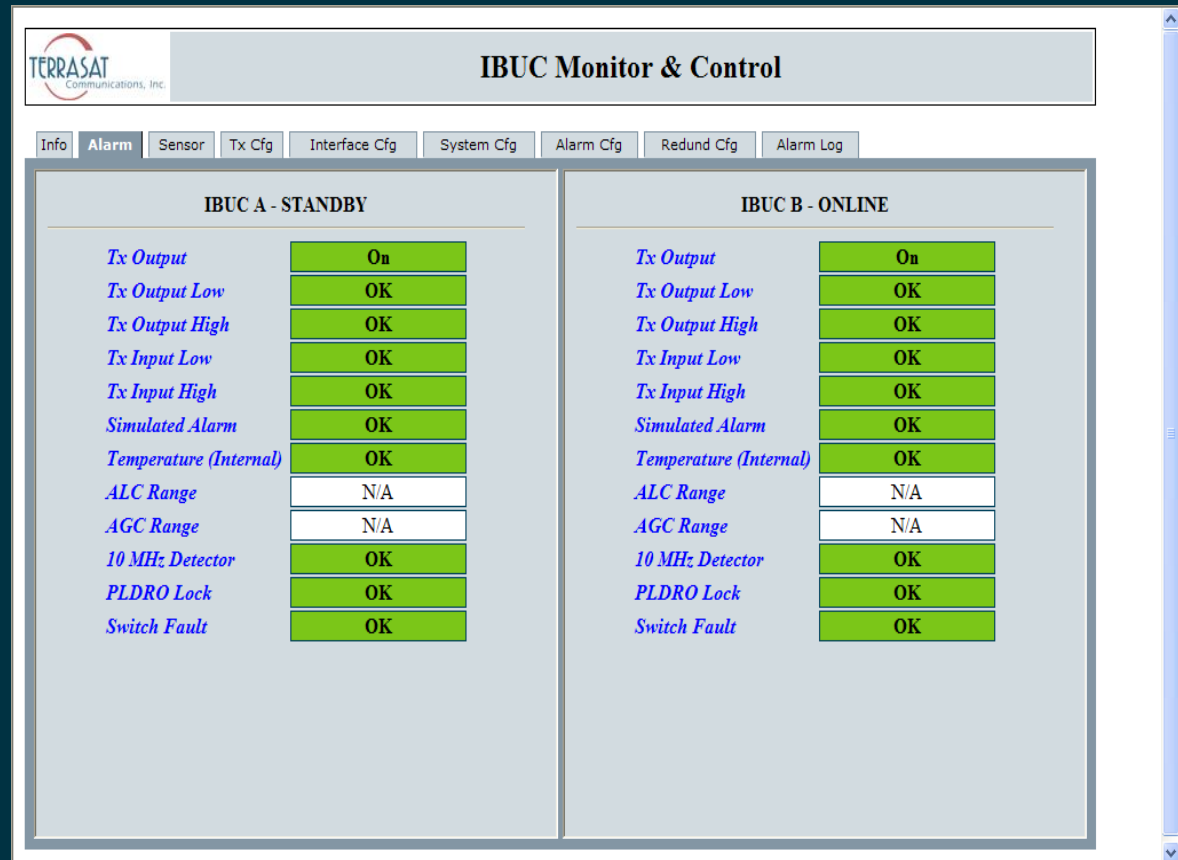
You Have Options



IBUC Diagnostics

Served as web pages for:

- Installation tool
- Remote monitoring
- Troubleshooting



The screenshot shows the 'IBUC Monitor & Control' web interface. At the top, there is a header with the TERRASAT logo and the title 'IBUC Monitor & Control'. Below the header is a navigation bar with tabs: Info, Alarm, Sensor, Tx Cfg, Interface Cfg, System Cfg, Alarm Cfg, Redund Cfg, and Alarm Log. The main content area is divided into two panels: 'IBUC A - STANDBY' and 'IBUC B - ONLINE'. Each panel contains a list of status indicators and their corresponding values, displayed in green boxes.

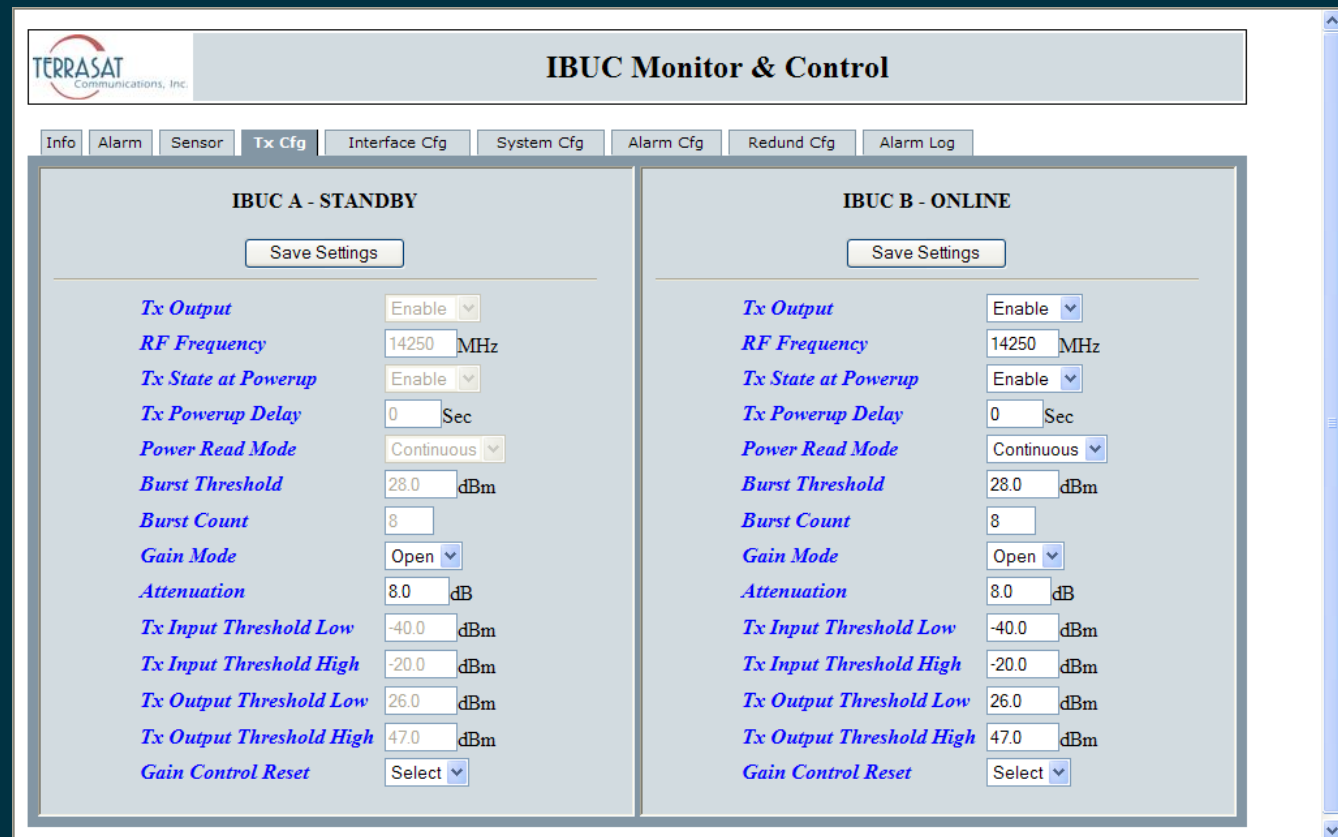
IBUC A - STANDBY		IBUC B - ONLINE	
<i>Tx Output</i>	On	<i>Tx Output</i>	On
<i>Tx Output Low</i>	OK	<i>Tx Output Low</i>	OK
<i>Tx Output High</i>	OK	<i>Tx Output High</i>	OK
<i>Tx Input Low</i>	OK	<i>Tx Input Low</i>	OK
<i>Tx Input High</i>	OK	<i>Tx Input High</i>	OK
<i>Simulated Alarm</i>	OK	<i>Simulated Alarm</i>	OK
<i>Temperature (Internal)</i>	OK	<i>Temperature (Internal)</i>	OK
<i>ALC Range</i>	N/A	<i>ALC Range</i>	N/A
<i>AGC Range</i>	N/A	<i>AGC Range</i>	N/A
<i>10 MHz Detector</i>	OK	<i>10 MHz Detector</i>	OK
<i>PLDRO Lock</i>	OK	<i>PLDRO Lock</i>	OK
<i>Switch Fault</i>	OK	<i>Switch Fault</i>	OK

IBUC Diagnostics

Calibrated power
detector reports
input and output
levels

Over 75 M&C
functions in six
web pages

Alarm History



The screenshot shows the 'IBUC Monitor & Control' web interface. At the top, there is a navigation bar with tabs: Info, Alarm, Sensor, Tx Cfg, Interface Cfg, System Cfg, Alarm Cfg, Redund Cfg, and Alarm Log. The 'Tx Cfg' tab is selected. Below the navigation bar, there are two main panels: 'IBUC A - STANDBY' and 'IBUC B - ONLINE'. Each panel has a 'Save Settings' button at the top. The 'IBUC A - STANDBY' panel contains the following settings:

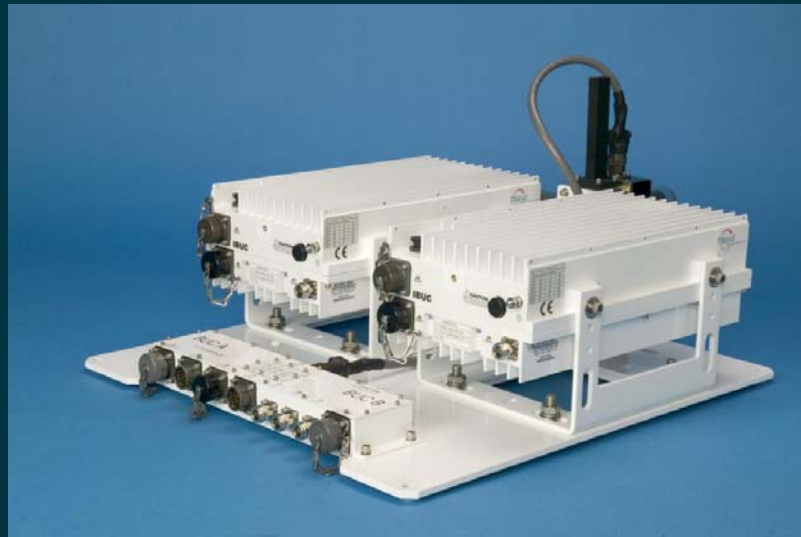
- Tx Output: Enable (dropdown)
- RF Frequency: 14250 MHz
- Tx State at Powerup: Enable (dropdown)
- Tx Powerup Delay: 0 Sec
- Power Read Mode: Continuous (dropdown)
- Burst Threshold: 28.0 dBm
- Burst Count: 8
- Gain Mode: Open (dropdown)
- Attenuation: 8.0 dB
- Tx Input Threshold Low: -40.0 dBm
- Tx Input Threshold High: -20.0 dBm
- Tx Output Threshold Low: 26.0 dBm
- Tx Output Threshold High: 47.0 dBm
- Gain Control Reset: Select (dropdown)

The 'IBUC B - ONLINE' panel contains the following settings:

- Tx Output: Enable (dropdown)
- RF Frequency: 14250 MHz
- Tx State at Powerup: Enable (dropdown)
- Tx Powerup Delay: 0 Sec
- Power Read Mode: Continuous (dropdown)
- Burst Threshold: 28.0 dBm
- Burst Count: 8
- Gain Mode: Open (dropdown)
- Attenuation: 8.0 dB
- Tx Input Threshold Low: -40.0 dBm
- Tx Input Threshold High: -20.0 dBm
- Tx Output Threshold Low: 26.0 dBm
- Tx Output Threshold High: 47.0 dBm
- Gain Control Reset: Select (dropdown)

Terrasat Advantages

- Innovative 1+1 redundancy with no indoor controller required



Thank You!

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