



The IBUC`s Tx 1:2 Advantage

All IBUC 1:2 protection systems are equipped with cutting-edge intelligent technology and benefits:

- Redundant internal 10 MHz reference available
- Hot Standby Mode
- Eco-Mode for warm standby, reducing energy consumption
- User-configurable alarm thresholds
- Arrives pre-assembled for easy installation
- Independent from LNB switching
- Higher MTBF for your SATCOM Systems
- Weatherized RJ45 ethernet interface for simplified connection
- Additional RJ45 ethernet port conveniently allowing integration with Rx LNB Systems

ULTIMATE MANAGEMENT & CONTROL

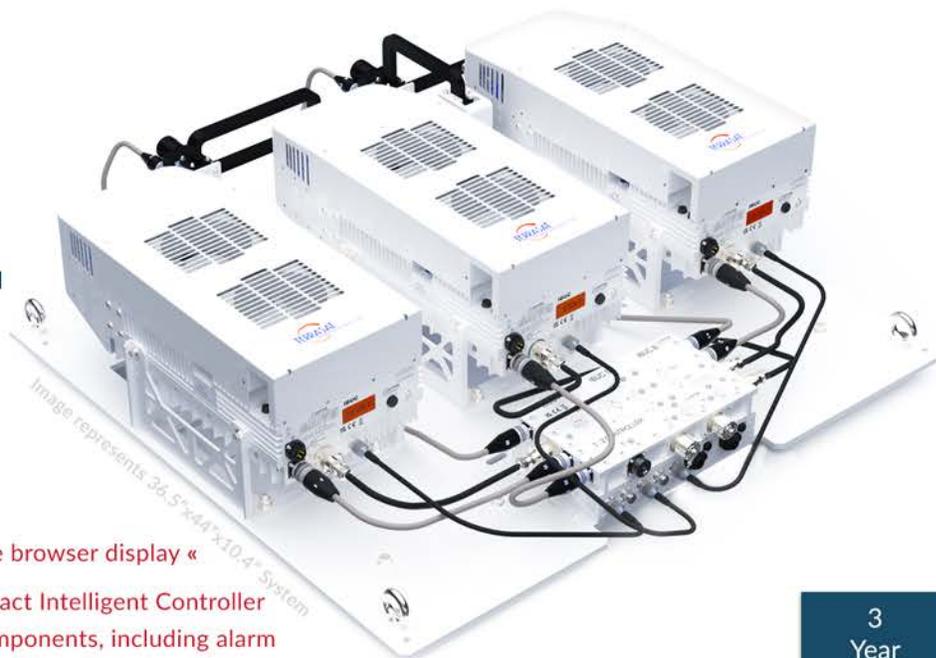
» RS232 Serial Ports «

» Local Web Interface integrating all 3 IBUCs in one browser display «

» The IBUC 1:2 redundant system based on a compact Intelligent Controller Interface. It can monitor and manage all system components, including alarm triggers, and initiate the switch-over «

C-Band | X-Band | Ku-Band | Ka-Band IBUC 1:2 Redundant System

Transmit (Tx) 1:2 Innovative Integrated Solution



3
Year
Warranty

Applications

For critical links where service interruption results in SLA penalties or lost revenue, uplink redundancy is a justified investment. Government networks, Air Traffic Control networks & any situation where communication must get through are candidates for IBUC redundancy.

High power systems can benefit from significant savings on the energy bill using Terrasat`s redundancy. Users can choose between standby modes. When Eco-Mode is selected, the spare unit is put into a warm standby mode with the M&C and all sensors in operation, but the power is removed from the amplifier.

The system on a mounting plate is provided with factory-default alarm settings. Several alarm thresholds can be customized during installation according to the customer`s preferences and local conditions. The result is a compact, integrated package ready to install.

Terrasat`s 1:2 Redundant Systems:

- Are a perfect fit for gateways, teleports, and critical application terminals operating within the spectrum of C-Band, X-Band, Ku-Band, and Ka-Band.
- Deploy reliability and higher MTBF for your SATCOM applications.
- Maximize uptime with high quality and minimize expenses. Get the maximum output power needed for each Pol and have one spare ready to be deployed in any side.

Tx 1:2 Interface Module

L-Band

Frequency Range	950 to 2150 MHz
Insertion Loss	5 dB Max (Includes Split)
Flatness	
Any 36 MHz Band	1 dB p-p Max
Full Band	2 dB p-p Max
Connector Options	N-Type, F-Type
Input/Output VSWR	1.5:1 Max for N Type 2.0:1 Max for F Type

10 MHz Reference

- Redundant Internal 10 MHz Reference Oscillator (optional)
- Auto-detection of external 10 MHz reference for automatic switch over
- External 10 MHz ref Insertion Loss: 2 dB Max

Sensors

10 MHz Reference Level Detectors for:

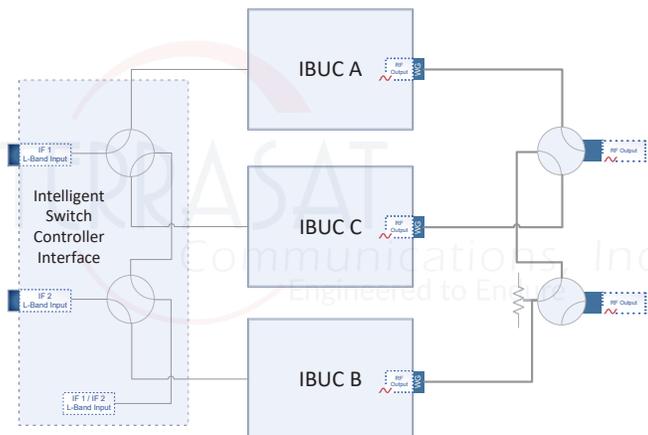
- External reference
- Internal reference

LED Indicators

- 2 Power Supplies
- A, B, and C Alarm
- Ethernet Activity
- A Side
- B Side
- C Side
- User Interface Ethernet (RJ-45)
- User Interface (Circular Connector)
- AUX Ethernet
- A, B, and C Online

WG Switch Control

Intelligent Interface Module controls the WG Switches



WG Switches

	C-Band	X-Band
Frequency	5.85 - 8.2 GHz	7.05 - 10.00 GHz
VSWR	1.05:1 Max	1.10:1 Max
Insertion Loss	0.02 dB Max	0.05 dB Max
Isolation	70 dB	80dB Min
Switching Time	100 ms Max	100 ms Max
Waveguide	WR137	WR112
	Ku-Band	Ka-Band
Frequency	10.0 - 15.0 GHz	26.5 - 40.0 GHz
VSWR	1.10:1 Max	1.10:1 Max
Insertion Loss	0.05 dB Max	0.15 dB Max
Isolation	75 dB Max	60 dB Max
Switching Time	80 ms Max	80 ms Max
Waveguide	WR75	WR28

Interface Power Supply

AC Supply

Connectors	C016 20C003 100 12
Input Voltage	100-240 VAC @ 800 mA max

Monitor & Control

Ethernet

RS232

Connectors	RJ-45 (J8 and J10)	
	PT02E-14-19S (J9)	
Summary Alarm	Form-C Relays	(A, B, and C)

Environmental

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

Mechanical

Systems Ships Assembled & Pre-Tested

System size varies with IBUC model selected. Different power levels and frequency bands will define different plate sizes for 1:2 Redundant Systems Examples:

1:2 System Size (including mounting plate)	Compatible IBUC models	IBUC unit Size ref.	Preliminary Size references Subject to changes without notice
43x62x13.25 in 1092x1575x337 mm	800W IBUC G C-Band GaN 400W IBUC R C-Band GaAs 400W IBUC R X-Band GaAs 200W IBUC R Ku-Band GaAs 300W & 400W IBUC G Ku-Band GaN	29x15x10.1 in 737x381x257 mm	
36.5x44x10.4 in 927x1117x264 mm	400W IBUC G C-Band GaN 200W IBUC G C-Band GaN 100W IBUC R X-Band GaAs 200W IBUC R X-Band GaAs 100W & 125W IBUC R Ku-Band GaAs 150W & 200W IBUC G Ku-Band GaN	24x10x7.4 in 610x254x188 mm	

Specifications subject to change without notice.

Updated: September 24th, 2025