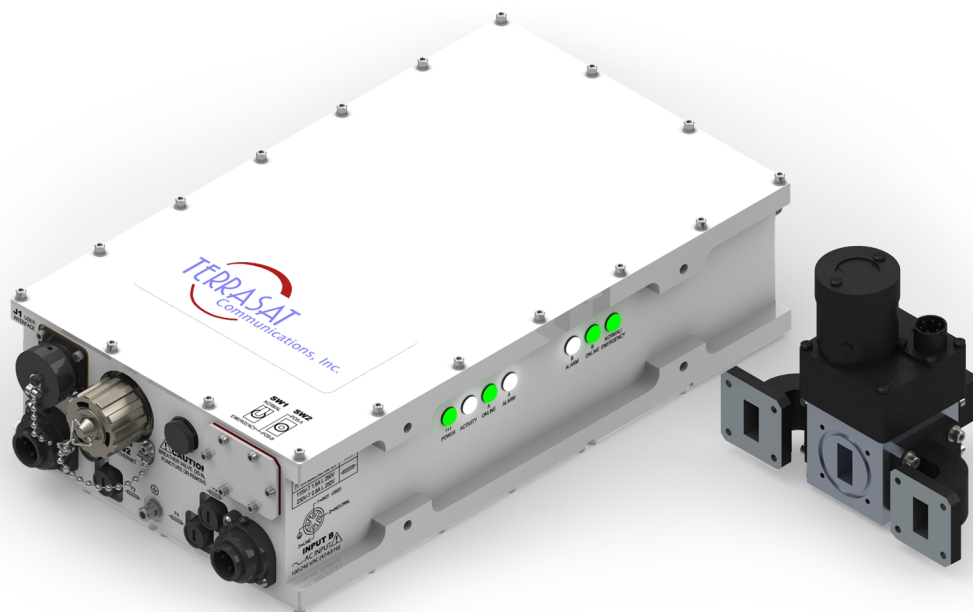


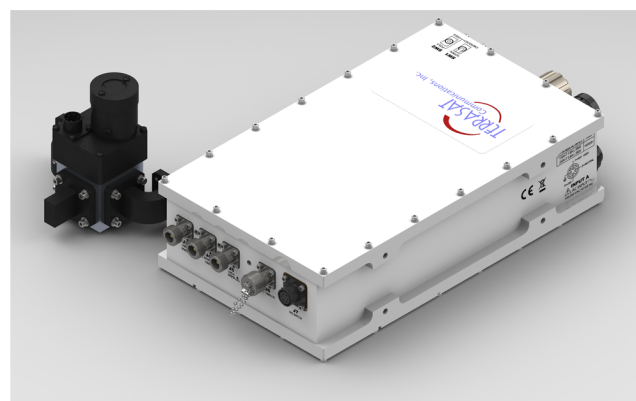
New
LNB 1:1 Protection System

A new Innovative- Integrated Solution.



Applications

The new RX 1:1 System adds multiband LNB control & redundant Internal 10MHz Reference to its extensive features. Terrasat's Receive 1:1 Redundancy System complements the IBUC Transmit Redundancy System. It is a complete outdoor-mounted package including RX 1:1 interface box, waveguide switch, & interconnecting cables. The receive redundancy switching function is entirely independent from the transmit system so that the operator is not encumbered with a chain-switching situation. An SNMP-compliant Ethernet interface enables local and remote monitoring & management.



Rear View

System Features

Extended monitoring/alarm indication of LNB parameters:

- Composite input power level
- LNB current
- Supply voltage
- 10 MHz reference level
- Multiband LNB control:
 - 4 Voltages
 - Tone

User-configurable alarm thresholds & switching criteria enable optimization for site conditions. Multiple options for local and remote M&C:

- | | |
|---------------------|----------------------------------|
| » SNMP | » Multi-function LEDs |
| » RS232/485 | » Manual override switch |
| » Handheld Terminal | » TCP/IP with embedded web pages |
| | » AC or DC power options |

New LNB 1:1 Protection

RX 1:1 Interface Module

L Band

Frequency Range	950 to 2150 MHz (950 to 2750 MHz Optional)
Insertion Loss	4 dB Max
Flatness	
Any 36 MHz Band	1 dB p-p Max
Full Band	2 dB p-p Max
Input/Output VSWR	2:0:1 Max
	N-Type (F), F-Type (F) Optional

10 MHz Reference

- From External Demodulator
- From External Reference Oscillator
- Single Internal 10 MHz Reference Oscillator (Optional)
- Redundant Internal 10 MHz Reference Oscillator (Optional)

Sensors

- A and B L-Band Input Composite Level
- 10 MHz Reference Level Detectors for:
 - External demodulator
 - External reference
 - Internal reference (single or dual)

- A and B LNB supply voltage detector
- A and B LNB supply current detector

LED Indicators

- Power Ethernet Activity
- A and B Online
- A and B Alarm Normal/ Emergency Mode

Multiband LNB Control

Voltages

- 13 V (11.5 to 13.9 V)
- 15 V (14.2 to 16.3 V)
- 18 V (16.6 to 20.0 V)
- 24 V (20.3 to 26.0 V)

Tone

- Frequency 22 kHz +/- 4 kHz
- Amplitude 600 mV +/- 200 mV
- Duty Cycle 40 to 60 %

WG Switch Control

- Manual / Auto Controller pulses WG switch
- Emergency Toggle triggers pulse for WG switch

WG Switches

	C-Band	X-Band
Frequency	3.3 - 4.9 GHz	7.05 - 10.00 GHz
VSWR	1.05:1 Max	1.10:1 Max
Insertion Loss	0.03 dB Max	0.05 dB Max
Isolation	80 dB min	80 dB min
Switching Time	200 ms Max	100 ms Max
Waveguide	WR229	WR112

WG Switches Continued

	Ku-Band	Ka-Band
Frequency	10.0 - 15.0 GHz	18.0 - 26.5 GHz
VSWR	1.10:1 Max	1.10:1 Max
Insertion Loss	0.05 dB Max	0.15 dB Max
Isolation	75 dB min	60 dB min
Switching Time	80 ms Max	80 ms Max
Waveguide	WR75	WR42

Power Supply

DC Supply Option

Connectors	MS3102R10SL-4P
Input Voltage	20 to 60 VDC
Current (Excluding LNBs & WG Switch Pulses)	
@ 24 V	300 mA Max
@ 48 V	150 mA Max

AC Supply Option

Connectors	C016 20C003 100 12
Input Voltage	100-240 VAC @ 250 mA max (Excluding LNBs & WG Switch Pulses)

M&C Interface

Ethernet

RS232/485

Handheld Terminal

Connectors	RJ-45
	PT02E-14-19S

Summary Alarm

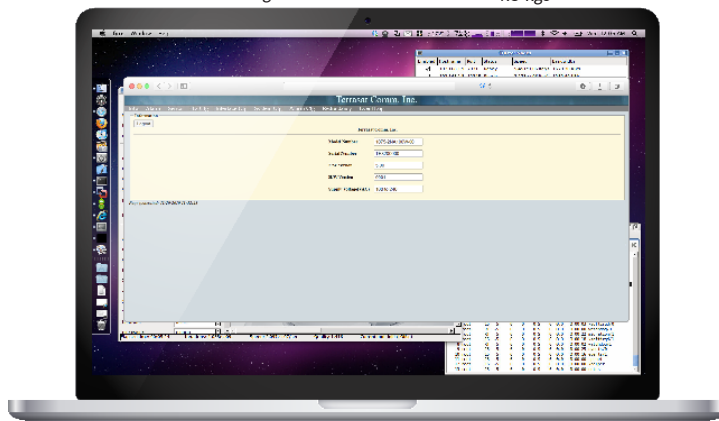
A and B Form-C Relays

Environmental

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

Mechanical

	AC	DC
Size, Interface Box	12.2 x 7.2 x 3.2 in.	12.2 x 7.2 x 3.2 in
	310 x 183 x 81 mm	310 x 183 x 81 mm
Weight, Interface	10 lbs 4.5 kgs	10 lbs 4.5 kgs



Web Interface Information Page

Specifications subject to change without notice.

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Questions? Contact Us

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