global skyware

XRE

3W Linear Power Ka-Band VSAT Transceiver

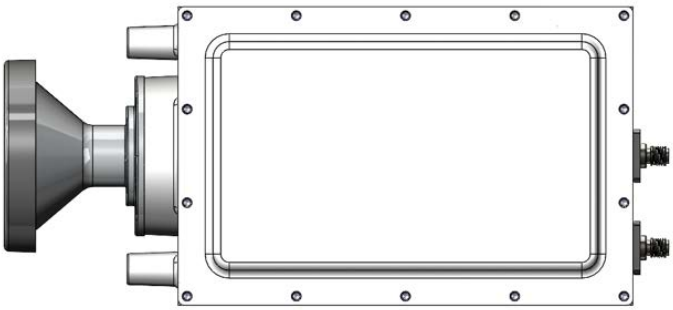
Key Features

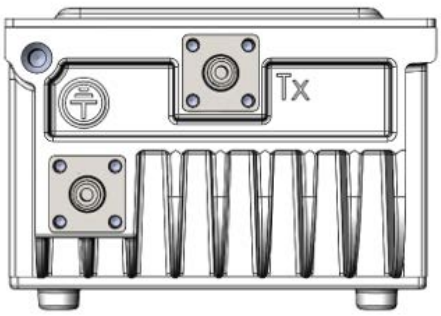
- BUC, LNB, OMT and TRF integrated into compact low profile package
- Integrated Zero-Touch Electronic Polarization Switching (EPS)
- Full Ka-band for Konnect VHTS
  28.4455 – 28.9455 GHz /
  29.5 - 30 GHz Transmit Bands
  17.3 – 20.2GHz Receive
- Compatible with all Global Skyware antennas
- Two cable platform (Tx IF & Rx IF)
- Power, Frequency, and Polarization Control
- Weatherproof IP-67 enclosure
- Meets all relevant regulatory compliance standards.
- Universal Modem Compatibility

The Global Skyware XRE Transceiver is a breakthrough in cutting edge Ka-Band VSAT engineering techniques and application. A Transceiver suitable for mass production and design ready for newer and wider Ka band satellite frequencies. The weatherproof IP-67 enclosure integrates a BUC, LNB, electronically configurable circular polarizer, and TRF guaranteeing consistent communications performance. The XRE is can be used for land or marine applications in fixed, fly-away, or mobile VSAT user terminals.

Supporting a dual-cable IF interface (Tx & Rx) to the Modem the XRE incorporates many years of Global Skyware Ka expertise. Global Skyware has now shipped over 175,000 Ka-Band Transceivers worldwide as well as over 700,000 BUC's/LNB's.

Universal Modem Compatibility : In-line DiSEqC adapter available for serial interface.





Global Skyware Limited
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Specsifications are typical and subject to change without notice

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SPECIFICATIONS

XRE Ka-band VSAT Transceiver

Feed and Polariser

Parameter	Minimum	Typical	Maximum	Unit	Note
Feed and Polarizer Subsystem		Integrated			Matched to Global Skyware antennas
Polarization		RHCP/ LHCP			Switchable via DiSEqC based protocol

TX Subsystem (BUC)

Parameter	Minimum	Typical	Maximum	Unit	Note
IF Input Frequency Range (Band 1 / 2)	1445.5 / 1650		1945.5 / 2150	MHz	
RF Output Frequency Range (Band 1 / 2)	28.4455 /29.5		28.9455 / 30.0	GHz	2 sub-bands
Local Oscillator Frequency (Band 1 / 2)		26.7955 / 27.85		GHz	2 LO's, configurable via M&C interface
Local Oscillator Phase Noise					IESS 308/309 Compliant
Local Oscillator Ext Ref Frequency IF Input		10		MHz	50 MHz optional
Impedance		75		Ohm	
RF Output Spurious Level (Perf. Standards)		ETSI EN301459/360 and FCC 47 CFR 15/25 AB			
TX Output Power Plin*		3		W	

* P_{lin} is defined as the power at which an ACPR of 25 dBc is chieved with a 1Msym/s QPSK modulated carrier with $\alpha = 0.2$

RX Subsystem (LNB)

Parameter	Minimum	Typical	Maximum	Unit	Note
RF Input Frequency	17.3		20.2	GHz	4 Sub-Bands : Selectable
IF Output Frequency Range	950		2150	MHz	
Local Oscillator Frequency	16.35		21.15	GHz	Configurable via Tone & Voltage
Local Oscillator Frequency Tolerance		+/- 25		ppm	Internal reference
Local Oscillator Integrated Phase Noise			2.0	deg	DSB rms, 100Hz - 1 MHz
Total Transceiver Noise Figure @ 25°C		1.5	1.7	dB	at the Feed Port (including TRF/OMT)
Conversion Gain	55	60	65	dB	
Image Band Rejection	40			dB	
IF Output Impedance		75		Ohm	

General

Parameter	Minimum	Typical	Maximum	Unit	Note
Operating Temperature	-40		+60	ºC	
Moisture/ Humidity Protection					IP67
Supply Voltage	15		36	V	Positive Polarity Only

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