DRU 17F16X

7 Watt Standard Ku-Band, Dual Polar VSAT Transceiver

Skyware Technologies introduce the DRU17F16X series Ku-Band integrated transceiver.

This compact and fully integrated VSAT transceiver interfaces with common VSAT modems.

A built-in Universal VSAT PLL LNB covers standard Ku-band as well as Co- and Cross-Polarization.

These features offer huge logistical advantages over existing VSAT outdoor systems which consist of discrete modules.

The integrated 7 W BUC was designed for high efficiency and linearity, thus reducing operating temperatures, increasing reliability and minimizing environmental footprint.

In addition, the integrated OMT, TRF, RRF and Diplexer are internally optimized which guarantees consistent system EIRP and G/T over a long lifetime.

- *Powerful, standard Ku-Band BUC*
- *High stability, universal PLL LNB*
- *Compact housing*
- *Integrated OMT, TRF and Diplexer*
- *Fast and easy installation*
- *Guaranteed EIRP and G/T*
- *100% tested over temperature*
- *High reliability*
- *RoHS compliant*
- *Feed horn adapter kits available for all common VSAT antennas*
- *Made in Germany*

DRU 17F16X

Model DRU17F16X
Ku-Band VSAT transceiver offers complete flexibility for global applications

SPECIFICATIONS

Model DRU17F16X 7 Watt Standard Ku-Band, Dual Polar VSAT Transceiver

General Specifications

Parameter	Minimum	Typical	Maximum	Unit	Note
Weight			3300	g	Radio Module without Feed
Operating Temperature	-40	0	55	˚C	
Moisture/Humidity Protection					IP67

Polarization Diplexer (OMT)

Parameter		Minimum	Typical	Maximum	Unit	Note
XPD on Common Port	TX	35	40		dB	Orthogonal Linear Polarizations
	RX	30				
Common Port Connector						18.5 mm Circular-WG, flat flange with 4 x M4 holes spaced as shown below

Tx Sub-System (BUC with External Reference)

Parameter		Minimum	Typical	Maximum	Unit	Note
RF Output Power	Linear Service - 1 dB GainP1dB		38.5		dBm	At the Antenna Feed
IF Input Frequency Range		950		1450	MHz	
RF Output Frequency Range		14.0		14.5	GHz	
Local Oscillator Frequency (Nominal)			13.05		GHz	
Local Oscillator Phase Noise (SSB)	@ 100 Hz			-55	dBc/Hz	
	@ 1 kHz			-72	dBc/Hz	
	@ 10 kHz			-82	dBc/Hz	
	@ 100 kHz			-92	dBc/Hz	
Local Oscillator Reference Frequency			10		MHz	Sine Wave
RF Output Spurious		Meets EN 301 428 and FCC 47 CFR 15/25 with a 49 dBi antenna				
RF Output Spectrum Inversion			No			
IF Input Impedance, Nominal			75 or 50		Ohm	
IF Input Connector			F-Type or N-Type			
Conversion Gain, Linear Operation		53	56	59	dB	
Supply Voltage		20		30	V	

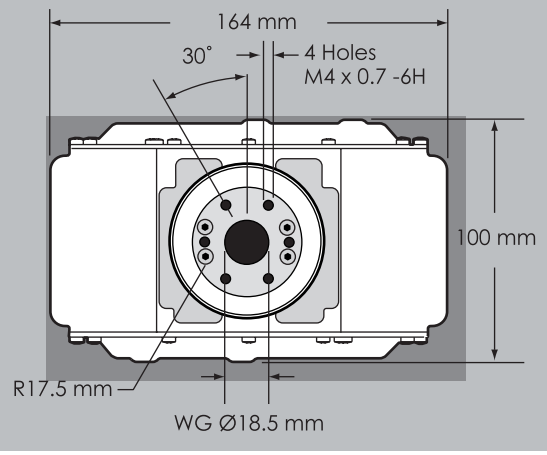
Dual Polarization Rx Sub-System (Dual Band PLL LNB with External Reference)

Parameter		Minimum	Typical	Maximum	Unit	Note
RF Input Frequency Range	Low Band	10.70		11.70	GHz	
	High Band	11.70		12.75	GHz	
IF Output Frequency Range	Low Band	950		1950	MHz	
	High Band	1100		2150	MHz	
Local Oscillator Frequency, Nominal	Low Band		9.75		GHz	
	High Band		10.60		GHz	
Local Oscillator Frequency Tolerance						Determined by External Reference
Local Oscillator Integrated Phase Noise				2.5	˚rms	100 Hz - 10 MHz
Local Oscillator Reference Frequency			10		MHz	Sine Wave
Noise Figure @ 25˚C			1.0	1.5	dB	TX On (Carrier On or Off)
Conversion Gain		50	56	62	dB	
IF Output IP3		+12			dBm	
IF Output Spectrum Inversion			No			
IF Output Impedance			75 or 50		Ohm	
IF Output Connector			F-type or N-type			
Band Switching Command			0/22		kHz	
Polarization Switching Command			13/17		V	
Supply Voltage		11		25	V	

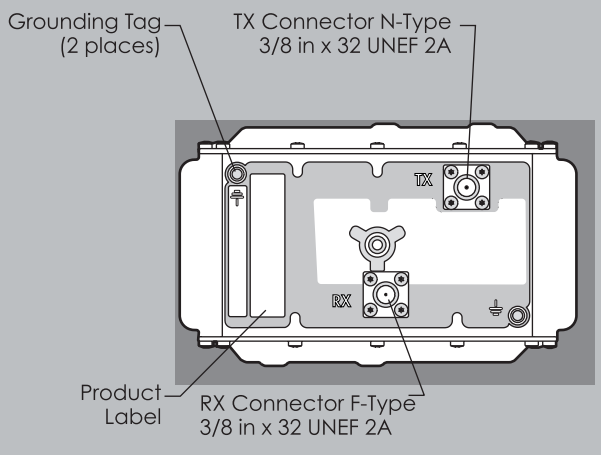
MECHANICAL SPECIFICATIONS

Model DRU17F16X 7 Watt Standard Ku-Band, Dual Polar VSAT Transceiver

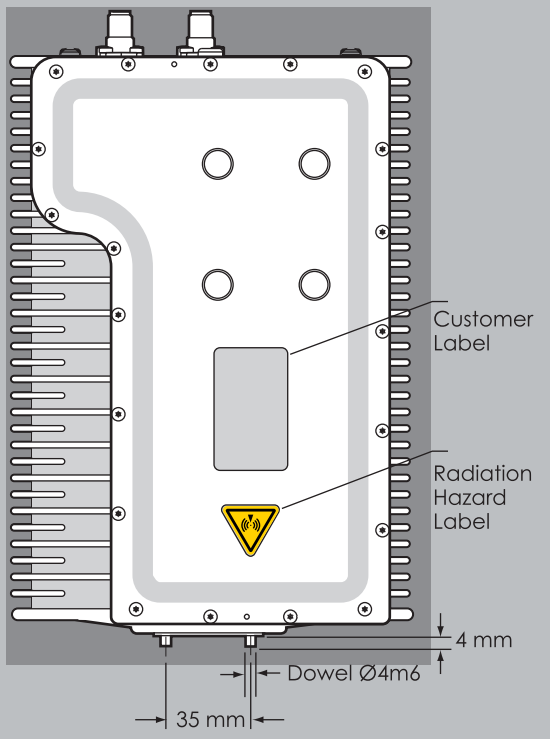
Front View



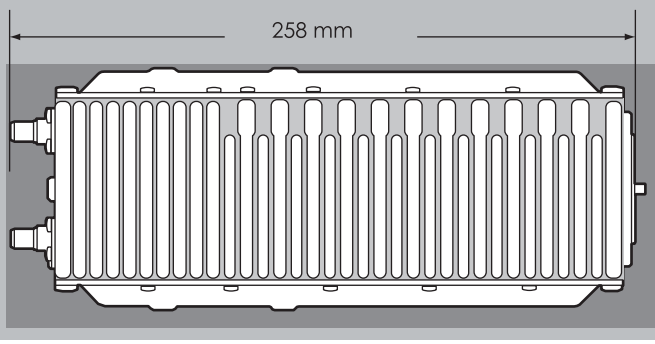
Rear View



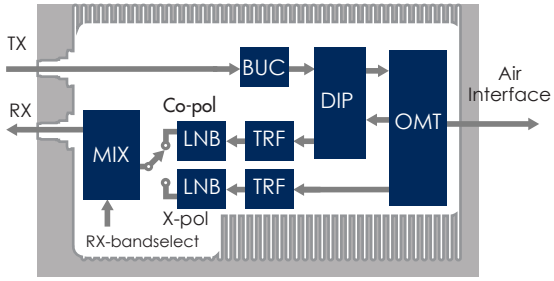
Top View



Side View



Internal Architecture



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