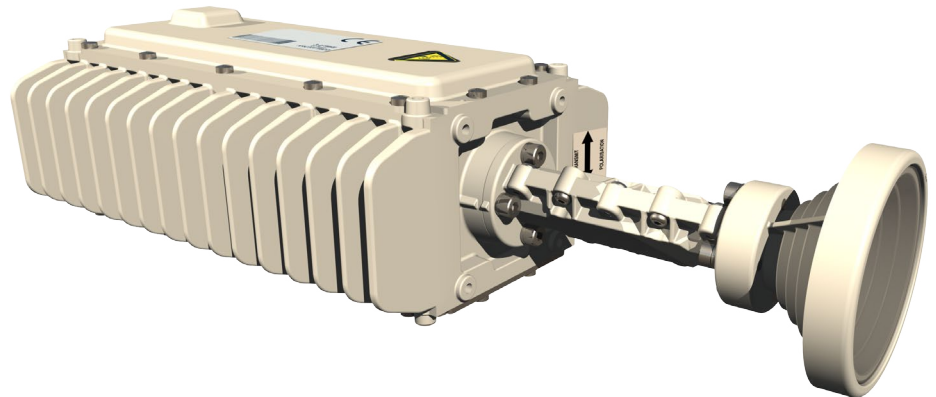




XRC33F16CD

Value Enterprise Ka-Band VSAT Transceiver



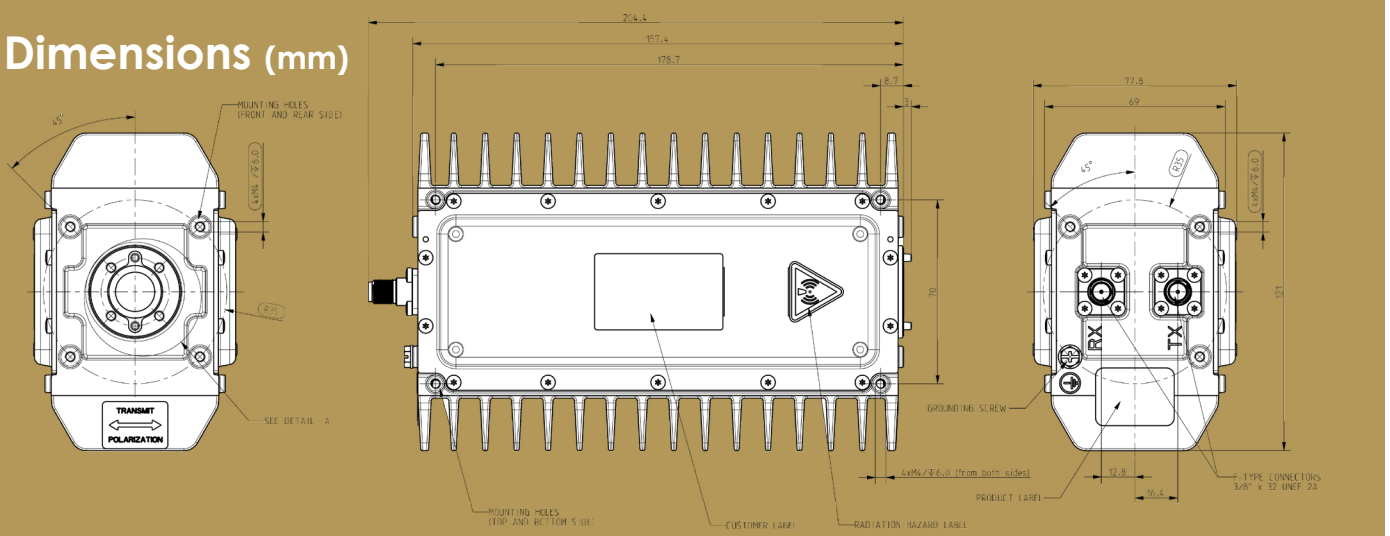
Key Features:

- Field configurable integrated circular polarizer
- PLL LNB
- L-Band or S-Band IF modem interface with 10 MHz reference
- Integrated OMT and TRF for best EIRP and G/T
- Durable IP rated enclosure



The Skyware Technologies XRC transceiver is the world's first Ka-Band VSAT transceiver capable of always-on connectivity on SCPC or TDMA data networks for demanding enterprise or government applications. The compact, rugged and lightweight IP-67 sealed enclosure integrates a BUC, PLL LNB, OMT, and TRF, guaranteeing consistent communications performance. Supporting flexible field-configurable circular polarization and a broad array of L-Band or S-Band IF modems, the XRC is optimized for high volume manufacturing with 1.5 and 3 watt transmit power options. Production units are 100% tested with a rigorous process to ensure reliable maintenance-free operation for years.

Dimensions (mm)



OMT

Parameter		Minimum	Typical	Maximum	Unit	Note
XPD on Common Port	TX	30	35		dB	
	RX	25			dB	
Common Port Connector						11.3 mm circular-WG, non-grooved flange, hole pattern acc drawing

TX Subsystem (BUC)

Parameter	Minimum	Typical	Maximum	Unit	Note
IF Input Frequency Range	950		1450	MHz	
RF Output Frequency Range	29.5		30.0	GHz	
Local Oscillator Frequency (Nominal)		28.55		GHz	External 10MHz Reference
Local Oscillator Integrated Phase Noise			2.2	°	DSB rms, 100 Hz – 100 kHz
Local Oscillator External Reference Frequency (Nominal)		10		MHz	
RF Output Power, P1dB		34.5		dBm	On OMT Common Port
Conversion Gain, Linear Operation	52	55	58	dB	Over frequency & operational conditions
IF Input Drive Power, Nominal Operation	-17			dBm	Application dependant
RF Output Spurious Level		According EN 301459 and FCC 47 CFR 15/25 AB			With 50 dBi (1.2m aperture) antenna
IF Input Impedance (Nominal)		75		Ohm	
IF Input Connector					F-type Receptacle
Supply Voltage	15		50	V	
Supply Current		1.0	1.5	A	24 V, Carrier On

Rx Subsystem (LNB)

Parameter	Minimum	Typical	Maximum	Unit	Note
RF Input Frequency Range	19.2		20.2	GHz	
IF Output Frequency Range	950		1950	MHz	
Local Oscillator Frequency (nominal)		18.25		GHz	
Local Oscillator Frequency Tolerance			±25	ppm	
Local Oscillator Integrated Phase Noise			2.0	deg	100Hz - 1MHz
Noise Figure @ 25°C			1.6	dB	TX ON (Carrier On/Off)
Conversion Gain	50	56	62	dB	
Image Band Rejection	30			dB	
IF Output IP3	+10			dBm	
IF Output Impedance		75		Ohm	
IF Output Connector					F-Type Receptacle
Supply Current			200	mA	
Supply Voltage	9		25	V	

General

Parameter	Minimum	Typical	Maximum	Unit	Note
Operating Temperature	-40		60	°C	
Moisture/ Humidity Protection					IP67
Weight		1800		g	Radio Module without Feed

