

3W Ka Band Transceiver – XRF3300

Feed and Polarizer

Parameter	Min	Typical	Max	Unit	Note
Feed and Polarizer Subsystem		integrated			Matched to Skyware antennas
Polarization			RHCP/LHCP		Field configurable, RX/TX orthogonal
XPD TX	25			dB	
XPD RX	20			dB	

TX Subsystem (BUC)

Parameter	Min	Typical	Max	Unit	Note
IF Input Frequency Range	1400		2400	MHz	See options
available RF Output Frequency Range	29.0		30.0	GHz	See options
available Local Oscillator Frequency available		27.2/27.6/27.65		GHz	See options
Local Oscillator Phase Noise			2.5	deg	DSB rms, 100 Hz – 100 MHz
kHz Local Oscillator Ext Ref Frequency		Option 50	10		
		Option 50			
		MHz Operational Power @ P1dB			
(20 dBc ACPR)		XRF3100 1.6		W	
		XRF3300 2.5		W	
		XRF3600 5.4		W	
IF Input Drive Power		-17		dBm	
IF Input Impedance		75		Ohm	F-type
receptacle RF Output Spurious Level		according to EN301 459 and FCC 47 CFR 15/25 AB			
Supply Voltage	15		50	V	DC via TX IF
port Power Consumption	XRF3100	18		W	
	XRF3300	23		W	
	XRF3600	28		W	

Rx Subsystem (LNB)

Parameter	Min	Typical	Max	Unit	Note
RF Input Frequency	17.8		20.2	GHz	see options
available IF Output Frequency Range	950		2150	MHz	see options
available Local Oscillator Frequency (nominal)		16.85/17.15/17.25/18.05		GHz	see options
available Local Oscillator Frequency Tolerance	PLL option				±25 ppm
	DRO		±4	MHz	option
Local Oscillator Integrated Phase Noise			2	deg	100Hz - 1 MHz
Total Transceiver Noise Figure @ 25°C	1.2	1.3	1.5	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		75 Ohm	F-type
receptacle Supply Voltage	18		52	V	
Power Consumption		15		W	

General

Parameter	Min	Typical	Max	Unit	Note
Operational Temperature	-40/-25		+60/+50	°C	See options
available Moisture/Humidity Protection Class					IP67
Weight		1.2		kg	Including feed