

UX00-01A

125MHz to 9GHz Up/Down Converter

General Description

The UX00-02A designed for radar systems applications. It has a high gain and flatness in bandwidth.



Applications

- Marine radar
- Navigation radar
- Weather radar
- Missile tracking radar
- Space exploration radar
- Surveillance ground radar
- Threat detection radar
- Air traffic control radar

Up Converter Electrical Specification

Parameter	Specification	Comment
Input Frequency	125MHz	BW= 30MHz
Output Frequency	9200 - 9500MHz	
Input Power	-10dBm	
Output Power	10dBm	Max.
Output Power Monitoring	-30dBm \pm 1dBm	Typ.
Gain	20dB	
Gain Flatness	\pm 1dB	
Gain Control	30dB	0.5dB Step
Gain Stability	\pm 1dB	
Harmonic	60dBc	
Spurious	65dBc	
VSWR	1.5:1	In/Output
Supply Voltage	+6V, -6V	
Supply Current	1.5A @ +6V 200mA @ -6V	Max.

125MHz to 9GHz Up/Down Converter

Down Converter Electrical Specification

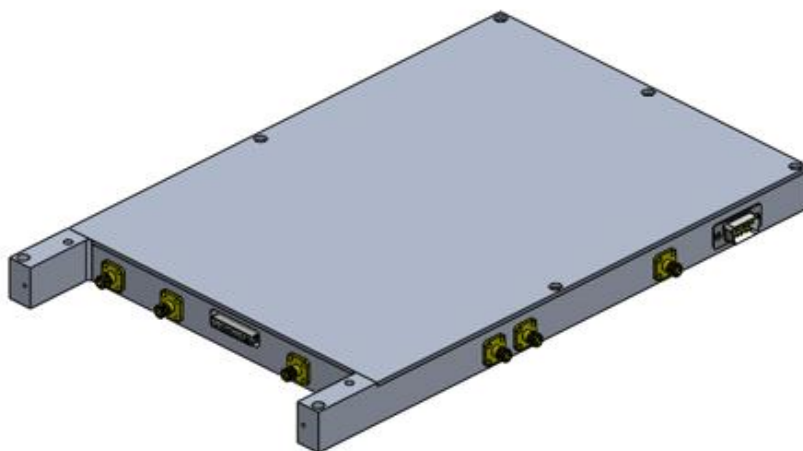
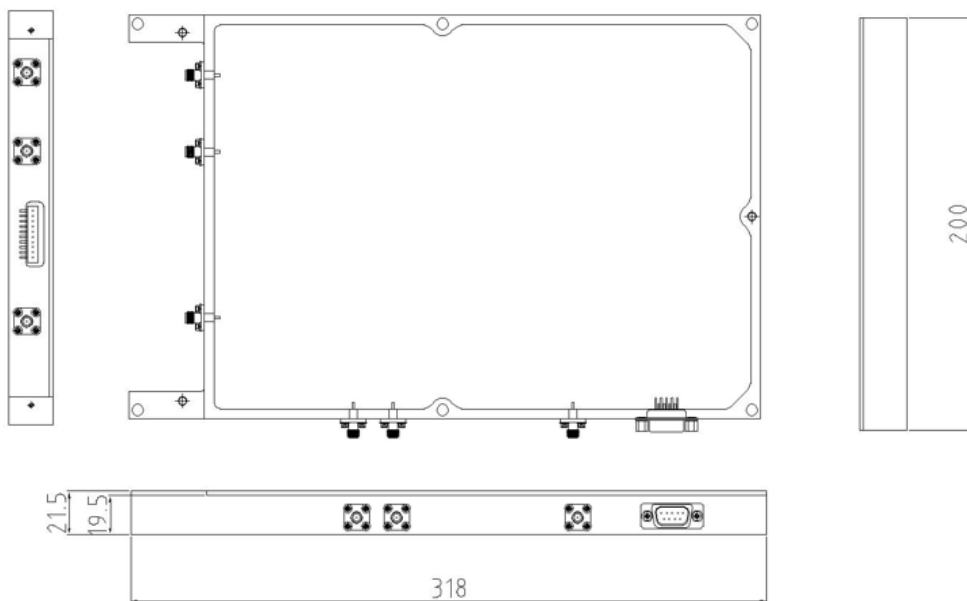
Parameter	Specification	Comment
Input Frequency	9200 - 9500MHz	BW= 30MHz
Output Frequency	125MHz	
Output Power	0dBm	Max.
Output Power Dividing	-20dBm \pm 1dB	
Gain	30dB	Typ.
Gain Flatness	\pm 1dB	
Gain Control	30dB	0.5dB Step
Gain Stability	\pm 1dB	
STC	40dB	Min.
NF	6dB	Max.
Harmonic	60dBc	
Spurious	65dBc	
VSWR	1.5:1	In/Output
Supply Voltage	+6V, -6V	
Supply Current	1.2A @ +6V 200mA @ -6V	Max.

Frequency Synthesizer Electrical Specification

Parameter	Specification	Comment
Reference Frequency	10MHz	OCXO
Output Frequency	10MHz, 2-port	Reference
	7240 – 7540MHz	1 st LO (Variable)
	1835MHz	2 nd LO (Fixed)
Output Power	3dBm ± 1dBm	Reference
	15dBm ± 1dBm	1 st LO
	0dBm ± 1dBm	2 nd LO
Phase Noise (1 st LO, PLL)	65dBc	100Hz
	90dBc	1KHz
	90dBc	10KHz
	95dBc	100KHz
Phase Noise (2 nd LO, PLL)	65dBc	100Hz
	90dBc	1KHz
	90dBc	10KHz
	95dBc	100KHz
Spurious	-60dBc	
Phase Noise (Reference OCXO)	140dBc	100Hz
	150dBc	1KHz
	155dBc	10KHz
Lock Time	70us	Max.
Harmonic	-60dBc	
Supply Voltage	+6V, -6V	
Supply Current	2.5A @+6V	Steady state
	200mA @ -6V	
	2.9A @+6V	Warm up
	200mA @ -6V	

Mechanical Specification

- Up converter Module



125MHz to 9GHz Up/Down Converter

- Down converter / Frequency Synthesizer Module

