

110GHz 高功率调频连续波雷达

110GHz High Power FMCW Radar

Product Features

- Frequency: 105-113GHz
- High Output Power
- FMCW Operation
- Built-in FMCW Sweep generation

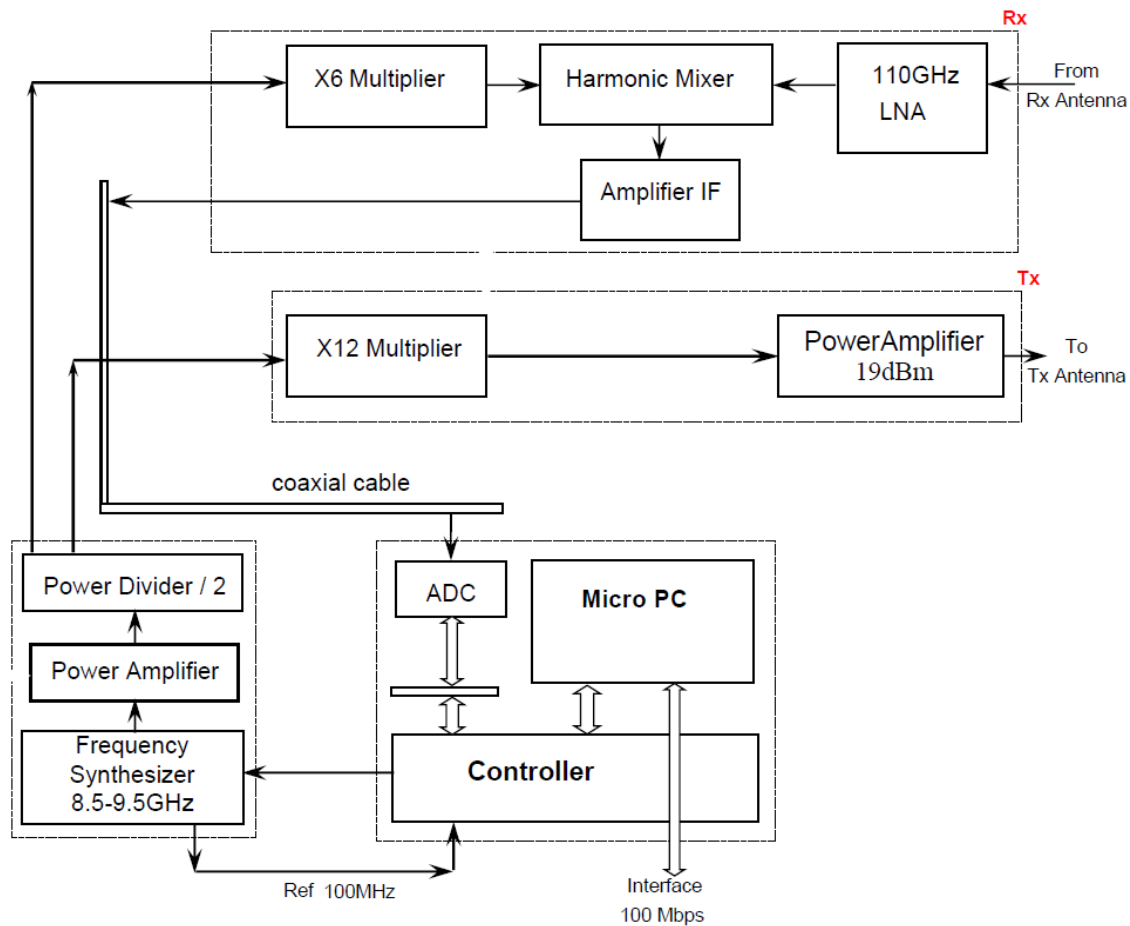
Electrical Specs(TA=+25℃):

Parameter	Minimum	Typical	Maximum
Operation Mode	FMCW		
TX FMCW Waveforms	sawtooth		
TX Frequency Range	105GHz		113 GHz
TX Output Power		19dBm	
Power Flatness		±1dB	
LO Frequency Range	8.75 GHz		9.375 GHz
RX Frequency Range	105GHz		113 GHz
RX Noise Figure		6dB	
RX Input P-1dB	-45dBm		
Synthesizer Frequency Range	8.5GHz		9.5GHz
Synthesizer Power	5dBm		
Sweep Time	0.1ms		10ms
Sweep Linearity		0.1%	
Output Reference Frequency		100MHz	
Antenna type	Cassegrain, symmetrical		
Antenna Gain		49dBi	
Power Supply		12V	
Operating Temperature(℃)	-30	+25	+85

Mechanical Specs:

Item	Specification
Input / Output (RF interface)	WR-08 Waveguide with W/UG-387/U-M Flange
Rotary Angle (horizontal)	360 deg.
Rotary Angle (Vertical)	±5 deg.
Rotary Angular Accuracy	±0.1 deg.
Rotary Load	100Kg max.
Waterproof Level	IP65
Size (W×L×H)	315mm×233mm×133mm
Weight	9Kg(TBD)

Simplified Schematic Diagram:



Options:

- 01 Integrated Antennas (High gain lens antenna/Cassegrain antennae)
- 02 Radar Heavy Rotating Platform