Pulsed Noise Radar Front-end Module at 94 GHz

- Powerful incoherent source
- 1 Watt typical output power
- High stability

- 5GHz white noise spectrum
- No high voltage supply required
- Compact solid state source

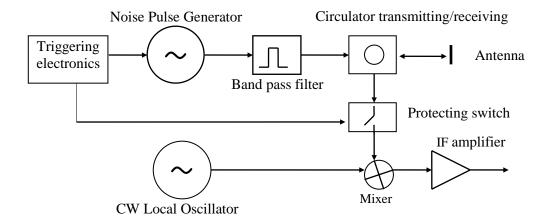
Applications

- Ground control in airports and other facilities
- Avoid collision systems
- Precise distance measurement in dusty and/or humid atmosphere
- Level sensing for any materials and liquids in huge tanks with foam/vapour
- Robotic sensors

Description

High power pulse noise source PNS series is used for the illumination of target. Noise nature of probing signal avoids the problem of interference. Image obtained by means of noise radar allows to recognize target better then the image obtained by means of coherent radar.

Block Diagram front end module.



Specifications

Frequency	Bandwidth of	Pulse	Duty	On/Off ratio	Power of	ENR Flatness	Receiver noise
range, GHz	launched	duration, ns	factor	of the receiver	output	within	factor,
	radiation,			protecting	pulse, mW	launched	dB
	GHz			switch, dB		bandwidth,	
						dB	
80÷100	5.0	50-100	>100	30	500	±1.5	7-9