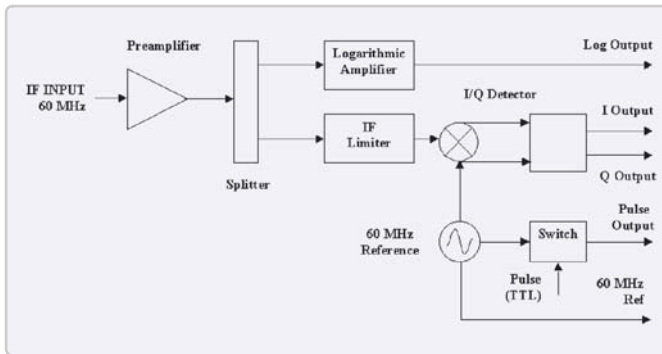


Doppler Radar Receiver

The RTR series of Doppler Radar Receiver was developed by RTI to measure the Doppler phase shift (I/Q Outputs) and intensity (Log output) in Radar applications.



Design Note: Radar Technology can customize any of our products to meet your individual system requirements. RTI also offers many form, fit, function replacements to old RHG Electronics Amplifiers.

IF INPUT	
Frequency	30 or 60 MHz
Input Signal Level	-110 to -30 dBm
Input VSWR	< 2:1
Bandwidths (other bandwidths up to 3MHz available at time of order)	0.15 / 0.38 / 1.2 MHz (user selectable)

LOGARITHMIC AMPLIFIER OUTPUT	
Load Resistance	50 W
Slope	25±1 mV/dB
Output Voltage: (user defined at time of order)	1V±0.1V(IF input = -30 dBm) -1V±0.1V(IF input = -110 dBm; Bandwidth = 0.15 MHz)
Rise Time:	< 6mS (Bandwidth = 0.15 MHz) < 3mS (Bandwidth = 0.38 MHz) < 700 nS (Bandwidth = 1.2 MHz)
Fall Time:	<16 mS (Bandwidth = 0.15 MHz) < 8mS (Bandwidth = 0.38 MHz) < 2 mS (Bandwidth = 1.2 MHz)

I/Q OUTPUT	
Load Resistance	50 W
Maximum Voltage Swing (user defined at time of order)	+ -1 V
Amplitude Balance	± 0.5 dB max
Phase Balance	± 5 ° max

*Parameters can be modified to meet specific application requirements

PULSE OUTPUT	
Frequency	30 or 60 MHz
Load Resistance	50 W
Output VSWR	< 2:1
Output level ("on" state)	5 ±1 dBm
Output level ("off" state)	< -95 dBm
Video (TTL) leakage	30 mV pp typ.
Rise/Fall Time	< 20 nS
Switching Time (turn on/off)	< 30 nS

REFERENCE OUTPUT	
Frequency	30 or 60 MHz
Load Resistance	50 W
Output VSWR	< 2
Output level	5 ±1 dBm
Frequency Stability (over temperature range -30 to +71°C)	±2.5 ppm max
Phase Noise (20 KHz offset)	< -130 dBc/Hz

POWER SUPPLY CURRENT	
+15 V	<250 mA
-15 V	<400 mA