

U R Rao Satellite Centre Indian Space Research Organisation



Low Noise Amplifiers (LNAs) and RF Amplifiers for GNSS & VHF bands

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Low Noise Amplifiers and RF Amplifiers for GNSS & VHF bands application.



VHF Low Noise Amplifier





GNSS LNA & RF Amplifier

Salient Features

- → Low Noise Amplifier(LNAs):
 - GNSS LNAs realized in L1 & L5 bands based on hetero-junction & bi-polar transistorbased designs offering excellent noise figure to amplify very weak signals.
 - VHF band LNAs support low noise amplification needs for receivers for automatic identification of ships.
- + RF Amplifiers:
 - Low-power designs based on hetero-junction
 & bi-polar transistors.
 - developed for use in GNSS bands of L1 & L5 as well as VHF bands.

Major Specifications

Low Noise Amplifiers	
Frequency bands	VHF(155-165MHz) GNSS L1 & L5
Gain	>20dB
Noise Figure	Better than 1dB
RF Interface	SMA
Operating Voltage	5V

RF Amplifiers	
Frequency bands	VHF (155-165MHz)
	GNSS L1 & L5
Gain	>30dB
RF Interface	SMA
Operating	5V
Voltage	

Technology Transfer

URSC/ISRO offers to transfer this technology of Low Noise Amplifiers (LNAs) and RF Amplifiers to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

