



DOPPLER RADAR

KA-BAND POLARIMETRIC SCANNING DOPPLER RADAR FOR CLOUD PROFILING

DESCRIPTION:

- Cloud radar operates in azimuth and elevation scanning modes providing three dimensional spatial nature of clouds spanning hemi sphere of radius about 20 kms.
- Cloud radar continuously records the returned intensity, Doppler (velocity) and Doppler width at each range gates

SYSTEM SPECIFICATION:

- Frequency: 35.6 GHz ($\lambda = 8.42\text{mm}$)
- Radar Configuration: Scanning Mode and Stationary Mode
- Transmit polarization: Single H, V and Alternating H or V
- Receive polarization: Simultaneous H and V
- Receiver noise figure: ≤ 6.0 dB
- Range resolution: 37.5-75-150 meters (selectable)
- Vertical/Radial Range Coverage: 0.3 km to 15 kms / 25 Kms

APPLICATION:

- Cloud microphysical studies etc
- Assimilation of end-products into numerical weather prediction models.

END USERS:

- IMD, IITM

