



WIND AND TEMPERATURE PROFILER

DESCRIPTION:

Wind and temperature profiler provides vertical profiles of horizontal winds in the troposphere up to 10 km and also gives temperature profile information up to 3 km. Wind profiler system as designed is a ground based clear air coherent Doppler Radar. It transmits a suitably designed coded RF Pulsed waveform at UHF frequencies. It also employs pulse coding technique to improve the vertical range.

Frequency	404.37MHz.
Peak power	16kW.
Pulse width	2 microsecond(coded), 16 microsecond (coded)
Duty ratio	Fixed coaxial- collinear dipole
Antenna type	Phased array
Antenna gain	32dB
Antenna side lobe	40dB down in horizontal dir
3dB beam width	5deg

APPLICATION :

Research tool in the Investigation of Prevailing Winds Waves (including gravity) waves) turbulence Atmospheric Stability meteorology Input data for weather forecasting

INSTALLATION SITE :

Indian meteorology department

