

Basic Sodar Operating In Monostatic/Doppler Mode

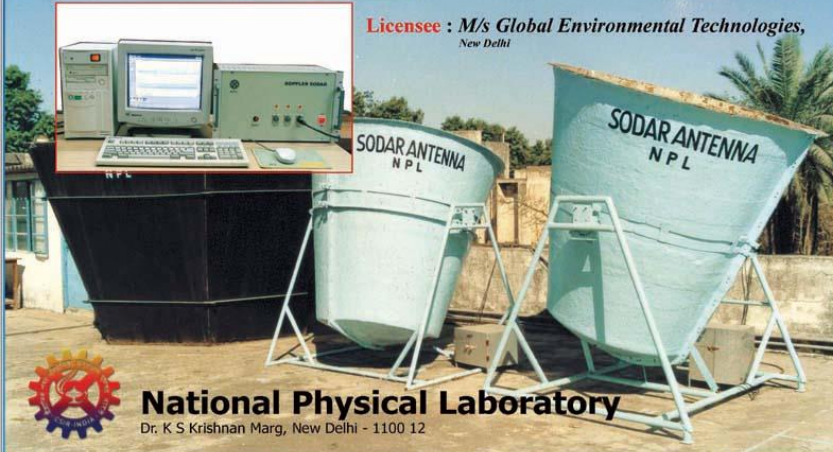
“Basic Sodar System operating in Monostatic / Doppler mode” has been designed and developed which measures thermal picture/ wind profiles of the lowest 1 km region of the atmosphere, through remote sensing. In this equipment, powerful pulse of sound is transmitted vertically up into the atmosphere and echo returns from thermal inhomogeneities are received back. The backscattered component is plotted as a facsimile picture of the atmosphere, revealing three dimensional plots to yield wind profile. The entire operation and data capturing is handled automatically by an IBM compatible PC.


NATIONAL PHYSICAL LABORATORY

Basic Sodar System Operating in Monostatic/Doppler Mode

Utility/Advantages	Specifications
<ul style="list-style-type: none">✓ Aid for air pollution management & Control strategies.✓ Acoustic remote sensing technique to provide air pollution meteorological data & wind profile up to 1 Km✓ Depicts online pictorial view of mixing/inversion height and air pollution meteorological hazards✓ Online assessment & short term forecasting of air quality✓ Recognised by Environment Protection Agencies in India & abroad.	<ul style="list-style-type: none">✓ Parameters: Monostatic/ Doppler✓ Probing range: 1-2 km*✓ Transmit frequency: 1-5 KHz*✓ Range resolution: 1-10m/17m*✓ Antenna: parabolic dish with acoustical shield / 3-axis orthogonal configuration✓ Transmit power: 10 W (Acoustical)✓ System control: IBM compatible PC *Software selectable
	Potential Users
	<ul style="list-style-type: none">✓ Air Pollution Management & Control<ul style="list-style-type: none">• Environment impact Assessment (EIA) for power plants, chemical, cement, mining and steel industries• Air pollution meteorology• Online assessment of air quality✓ Air-sea interaction<ul style="list-style-type: none">• Boundary Layer Research✓ Microwave communication<ul style="list-style-type: none">• Aviation

Licensee : M/s Global Environmental Technologies,
New Delhi



 **National Physical Laboratory**
Dr. K S Krishnan Marg, New Delhi - 1100 12

Contact:

Head, Industrial Liaison Group (ILG)
Room No. 46-A, Main Building
CSIR-National Physical Laboratory
Dr. K.S. Krishnan Marg
New Delhi 110012, INDIA.

Email: headilg@nplindia.org

Tel: +91-11-4560-8247/9385

Fax: +91-11-4560-9310