

## Z V U K - 1 S O D A R

A ZVUK-1 sodar is intended for monitoring the temperature stratification of the atmospheric boundary layer. The device identifies the stratification type (the class of atmospheric stability) and determines the altitude of the mixing layer, altitudes and thickness of the temperature inversions, and structure characteristic of the temperature field.

The sodar is compact, highly automated, and provides virtually unattended operation. The sodar is capable of operating under the complicated environmental conditions at high noise level due to shielding. The antenna is equipped with an automatic heater and guarantees the unattended operation in winter. The personal computer controls the sodar performance and recording and processing of the echo-signal.

Specially trained operators are not required to maintain the sodar. The sodar is intended for routine use by meteorologists and specialists in weather forecasting, ecology, and atmospheric optics. The sodar can also be applied to hydrometeorological service, monitoring of air, etc.



### SPECIFICATIONS

Altitude range, m	35–500
Carrier frequency, Hz	1650–1850
Electric power, W	65
Antenna (diameter, m)	paraboloid 1.0
Beam width, deg	≤ 15
Height of the noise shielding, m	1.55
Pulse repetition period, s	4.0
Pulse width, ms	150
Vertical resolution, m	25
Recording system	echograph, PC
Power supply	200 V, 50 Hz
Power consumption, W:	
by electronic equipment	300
by the antenna heater	1000



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