

ACOUSTIC DOPPLER VELOCIMETER (ADV)



Year of Purchase: 2020

Cost: 17.18 Lac

Acoustic Doppler velocimetry (ADV) is **designed to record instantaneous velocity components at a single-point with a relatively high frequency.** Measurements are performed by measuring the velocity of particles in a remote sampling volume based upon the Doppler shift effect.

An acoustic Doppler velocimeter (ADV) operates by the principle of Doppler shift. This concept is illustrated by a simple example: if you are standing at a railroad crossing and a train blares its horn as it passes by, you hear the horn at a higher pitch as the train approaches, and then a lower pitch as it leaves. As the train moves toward you, sound waves from the horn are compressed (meaning higher frequency) and you perceive the sound at a higher pitch. As the train leaves you, sound waves are no longer compressed and you hear a lower-pitched, lower frequency noise.

Standard Features Lab Model

- Uses a desktop PC for power and data storage
- Sensor mounted on a 40 cm stem
- Standard cable length to PC: 10 m Field Model
- Self-contained processor in splash-proof or underwater housing
- Sensor mounted on 25 cm stem
- Standard cable length to processor: 10 m
- Analog and serial outputs

Power (Field System)

- Power Supply: 12-24 V DC
- Power Consumption: Approximately 2.5-4 W operating, less than 1 mW in sleep mode