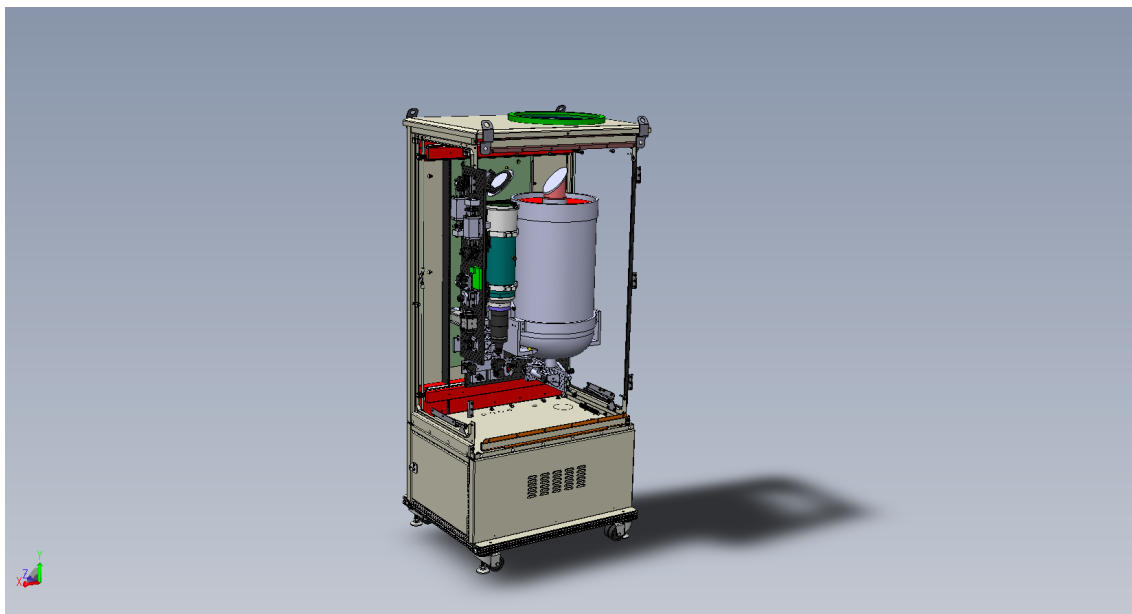


LIDAR SYSTEMS



[Contact Us About LIDAR Systems \(/content/contact-us?id=214\)](/content/contact-us?id=214)

Lidar systems are active remote sensing systems. Typical systems collect pulsed laser energy scattered from aerosols or gas molecules to monitor atmospheric properties such as optical extinction, gas and aerosol concentrations, temperature, and winds.

Our water vapor Differential Absorption Lidar (WV DIAL) profiles water vapor concentration in the atmosphere as a function of range. It does this by monitoring the differential absorption between two wavelengths, one chosen to be on an individual water absorption line and the second chosen well away from the line. The lidar transmits microjoule pulses at 10 kHz repetition rates to remain eye-safe and to provide the signal averaging required for good precision. The lidar integrates many telecom industry mature components for high reliability and is fully automated.

This technology is intended to monitor the lower atmosphere to provide increased data necessary for improving the precision of near term weather forecasting and long term climate change prediction models.

The WV DIAL product specifications can be found [here](#).

Other PSI lidar systems include:

- Coherent Lidar – This eye-safe lidar senses winds as a function of range with application to turbulence mitigation onboard aircraft.
- Remote Methane Leak Detector – The RMLD is an integrated path differential absorption lidar. It is a survey tool for the natural gas industry used to monitor for leaks in municipal distribution systems.

