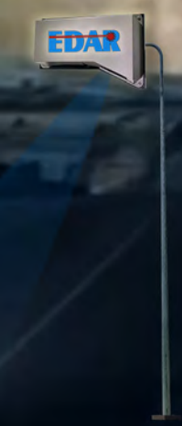
IS NOW



Hager Environmental & Atmospheric Technologies HEAT

heat

HEAT, LLC was founded in 2009 by Dr. J. Stewart Hager to develop an advanced and unique technology aimed at revolutionizing the Vehicle Emission Testing industry. Based on the experience gained through his involvement with the development of the ASCENDS satellite for NASA Langley, and with the support of a set of well-qualified engineers with unique expertise, HEAT completed in 2013 the development of the EDAR System. Since then, EDAR (Emission Detection And Reporting) has been proven, tested, and utilized internationally. EDAR is a multi-patented eye safe laser-based technology capable of detecting and measuring remotely the infrared absorption of all gases being emitted from a moving vehicle.

Globally, EDAR has been successfully deployed commercially. As a result, HEAT has become a preferred vendor of remote sensing services worldwide.

- Uses similar technology as active satellite remote sensing platforms.
- Measures and Quantifies: Carbon Dioxide, Carbon Monoxide, Nitric Oxide, Nitrogen Dioxide, Total Hydrocarbons including Methane, and Particulate Matter.
- Measures exhaust gas temperature.
- Laser-based technology: Class 1 eye-safe lasers, FDA approved, and certified IEC 60825.
- Existing geometry allows EDAR to see and image the entire plume and provides an increased sensitivity in some cases of over 2,000% along with a resolution of a million times more over exisiting technologies.
- Contains a fully-tested hardware assembly and a robust software engine set by a sequence of well-proven algorithms.
- Streamlined and convenient approach to emissions testing and monitoring.

Hager Environmental & Atmospheric Technologies (HEAT)
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THE FUTURE

Maximize Air Quality Benefits:

Highest accuracy measurement of CO, NO, NO_2, CO_2, Total HC and $PM_{2.5}$ of all light and heavy-duty vehicles burning both diesel and gasoline under normal driving conditions.

Proven and Tested:

EDAR Images the Plume, Detects the Exhaust Temperature, and has Accurate R^2 of nearly 1.

No Calibration Required.

Real World & Laboratory Tested.

Utilized Internationally.

One Footprint for Both Heavy and Light Duty:

EDAR is an unmanned system that sits 5m above the roadway, and can detect the plume regardless of the tailpipe location.

EDAR
Emission Detection And Reporting

Our Box Thinks Outside The Box

Skip the Line with EDAR

Motorist Convenience:

The unobtrusive system sits on a pole, on multi-lane roads, without inconveniencing or alarming motorists while allowing for real world driving conditions.

Positive Environmental Impact:

Knowing what is coming out of the tailpipe is the most accurate and fair way to implement and enforce policies all while positively maintaining a clean environment.

Cost Reduction:

EDAR is a cost-efficient method of screening thousands of cars daily.