



#### ► Core Measurements

- ▷ CO
- ▷ CO<sub>2</sub>
- ▷ NO<sub>x</sub>
- ▷ SO<sub>2</sub>
- ▷ O<sub>2</sub>
- ▷ Flow
- ▷ Dust

#### ► Optional Measurements

- ▷ Formaldehyde
- ▷ Ammonia
- ▷ Hydrogen Sulfide
- ▷ Methane
- ▷ Hydrogen Chloride
- ▷ Hydrogen Fluoride
- ▷ Others

Various concentration ranges available to meet your specific application



## Ohio Lumex CEM Systems

- MEGA™ Continuous Emissions Monitor (CEMS)
  - ▷ CO, CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub>, O<sub>2</sub>, Others
- Dust Monitors
- Flow Monitors
- Data Acquisition Systems (DAS)

### Applications

- |              |                     |
|--------------|---------------------|
| ► Power      | ► Mining            |
| ► Cement     | ► Metals            |
| ► Aluminum   | ► Iron and Steel    |
| ► Fertilizer | ► Refineries        |
| ► Biomass    | ► Waste Incinerator |
| ► Ceramic    | ► Pulp and Paper    |
| ► Sugar      | ► Gas Turbines      |
| ► Bio Diesel | ► Petrochemical     |
| ► Ethanol    | ► Glass             |



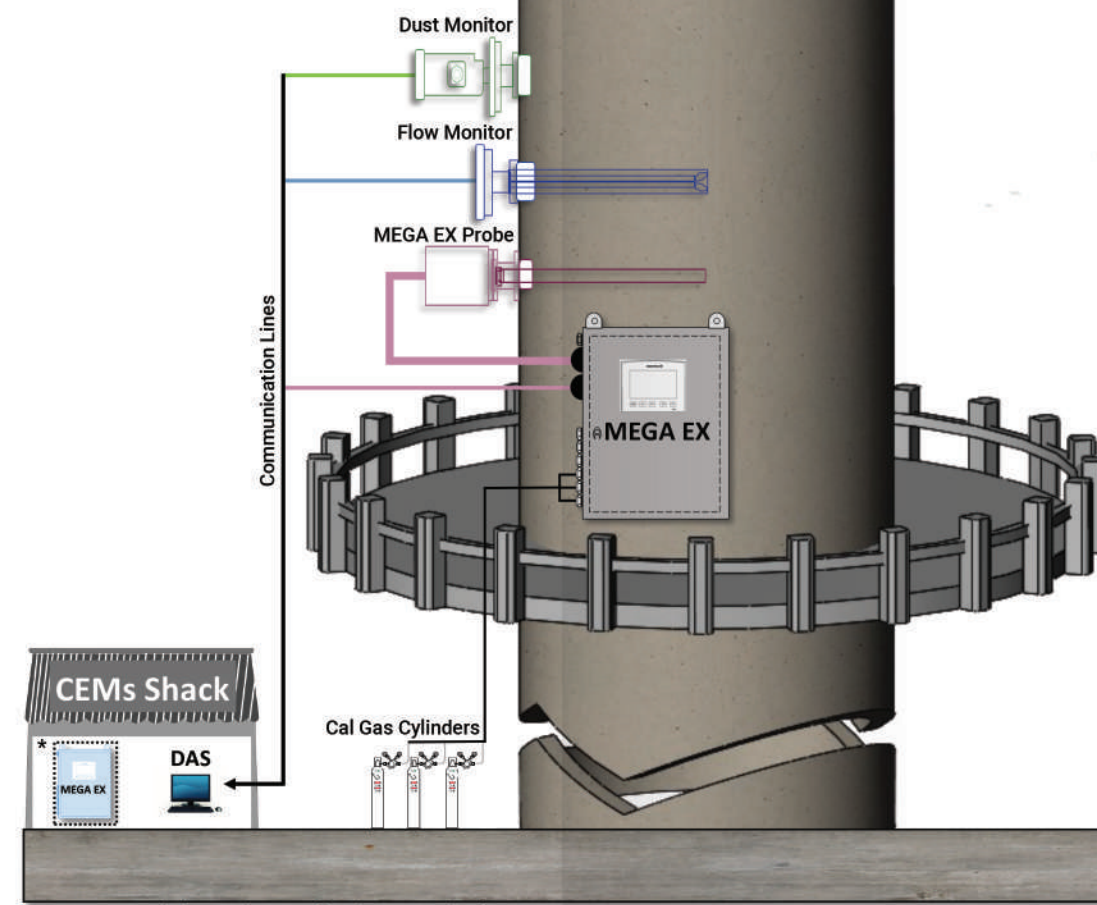


## MEGA EX Multi-Component Continuous Emissions Monitor

- ▶ **Durable and Reliable Design**
  - ▷ Stack Mountable or Ground Installation
- ▶ **Compact and Lightweight**
- ▶ **Measure Multiple Gases Simultaneously**
  - ▷ No Additional Instruments Needed
- ▶ **Flexibility to Use Optimal Measurement Technology Depending on Application**
  - ▷ Non-Dispersive Infrared (NDIR)
  - ▷ Ultra-Violet Differential Optical Absorption Spectroscopy (UV-DOAS)
  - ▷ Chemiluminescence (CLD)
  - ▷ Tunable Diode Laser (TDL)
  - ▷ Electro-Chemical Devices (ECD)
  - ▷ Optical Sensor
- ▶ **Designed for Process Control and/or Emissions Monitoring**
- ▶ **Economical Solution**
  - ▷ Low Acquisition Cost
  - ▷ Inexpensive to Operate
- ▶ **Easy to Service and Maintain**

## Data Acquisition System (DAS)

- ▶ **Integrated CEM Data Logger, Data Handling and Reporting System**
  - ▷ Station Manager Installed in CEMS Rack
  - ▷ System Manager for Control Room
- ▶ **Extensive Selection of CEMS Compliance and Data Reports**
- ▶ **Microsoft SQL Server, Access, or Oracle Database Compatible**
  - ▷ Data Exportable to Microsoft Excel Spreadsheets
- ▶ **Data Editor, Edit Trail Program, QA Programs, Alarms, and Trend Display**
  - ▷ Voice Message and Email Alarms
  - ▷ Remote Access and Real-Time Data Display
- ▶ **Compliant with US EPA 40 CFR Part 60 and 75 Requirements**



\*MEGA EX can be located on stack or in CEMS shack

## Dust Monitors

- ▶ **Opacity and Dust Monitor**
  - ▷ Dynamic Detection Principle (DDP) Measurement
  - ▷ Cross Stack / Duct
  - ▷ Automatic Calibration
  - ▷ Compliant with US EPA 40 CFR Part 60 and 75 Requirement
- ▶ **Dust Monitor**
  - ▷ Laser Backscatter Principle

## Flow Monitors

- ▶ **Optical Scintillation**
  - ▷ Cross Stack / Duct
  - ▷ Measures Path 90 Degrees to Stack
    - ▶ Second Platform Not Required
  - ▷ Unaffected by path length, media, pressure, moisture, and opacity
  - ▷ No Interferences
  - ▷ Automatic Calibration
  - ▷ Compliant with US EPA 40 CFR Part 60 and 75 Requirement
- ▶ **Ultrasonic**
  - ▷ Compliant with US EPA 40 CFR Part 60 and 75 Requirement
- ▶ **Pitot Tube**

