

Green House Gas Monitoring solutions from ABB

Monitoring for CO₂

Upgrade solutions for Advance Optima AO2000 Series Continuous Gas Analyzers expand monitoring capacity to include CO₂ green house gas emissions measurement to address expected US EPA environmental compliance requirements.

Expected US federal and state environmental regulations pertaining to green house gas (GHG) emissions monitoring, impact reporting requirements for cement kilns, nitric acid plants, power generation, incinerators, refineries and petrochemical plants.

To satisfy these requirements, ABB offers economical and convenient upgrades for installed ABB AO2000 Series Continuous Gas Analyzers (CGA) to enable CO₂ gas measurement.

Standard upgrade options are available for ABB AO2000 Series CGAs. Additional options to meet site and application specific requirements, as well as options for non-ABB analyzers, are available upon request.

Installation and commissioning services for upgrades can be implemented on-site by ABB certified engineers.

Features and Benefits

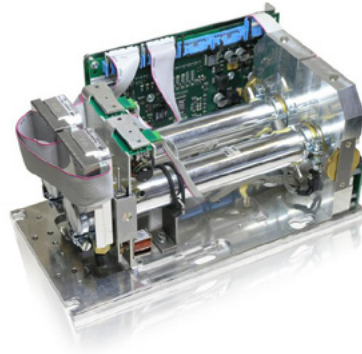
- Integrates easily into existing CEMS
- Achieves EPA Compliance for CO₂ Monitoring
- Multiple upgrade options
- No additional training required
- High quality ABB components

Standard AO2000 Series CGA Upgrades

Upgrade options 1 and 2 describe the most common options available for upgrades.

Option 1: Upgrade description

Modification of current Continuous Emissions Monitoring Systems (CEMS) through the addition of the CO₂ measurement to existing Uras14 Infrared Photometer within the AO2000 Series CGA System.



Option 2
Uras26 Module



Option 3
Uras26 Infrared Photometer

- Integration of CO₂ measurement with current equipment uses minimal hardware and field service to incorporate with the CEMS DAS, meeting permit guidelines.
- Existing spare parts can be used. No training is required. No external re-tubing of the CEMS.

This option may require an additional Analog Output card.

Option 2: Upgrade description

Replacement of existing AO2000 Uras14 Module (CO, SO₂) with new Uras26 Infrared Photometer, permitting measurement of CO, SO₂, and CO₂.

- Reduced downtime to the existing CEMS, compared to Option 1.
- Existing spare parts can be used. No external re-tubing of the CEMS.

This option may require an additional Analog Output card.

Option 3: Upgrade description

Available for ABB and non-ABB equipment

Expansion of existing AO2000 system to include a new Uras26 Infrared Photometer to enable CO₂ measurement.

- Second Uras26 analyzer module added for CO₂ to the existing AO2000 system and retains existing Uras14 module for current measurements.
- No additional tubing is required to the sample handling system.
- No additional spare parts requirement.
- Wall mount or rack mount housing is available.

This option may require an additional Analog Output card.

Option 4: Installation of stand alone analyzer

Available for ABB and non-ABB equipment

Installation of a stand alone EasyLine or Advance Optima analyzer to measure CO₂ using an Uras26 Infrared Photometer (Model EL3000 pictured). Wall mount or rack mount housing is available for the EL3000 series



Option 4
EasyLine EL3000 Series

- Stand alone analyzer requires integration into the CEMS DAS without the digital communications of the AO2000.
- May require revised permit submittals.
- Additional spares, training and sample handling modifications are included.

For additional information regarding the AO2000 Series CGA Upgrade or other CGA upgrades, complete the information below and fax to the North America Customer Service Center/Analytics : Fax 713 821 3523

Company Information

COMPANY NAME

SITE NAME

SITE LOCATION

ADDRESS

CITY

STATE

ZIP

For Option 3 and Option 4 the new analyzer/module is piped in series with the existing analyzers, requiring no additional sample handling equipment.

About ABB Analytics

For more than 20 years ABB has demonstrated its commitment to providing technical solutions for environmental compliance measurements. Based in Houston, Texas, with partners in all areas of the United States, the ABB staff has the expertise and experience to understand and meet the requirements of GHG reporting and assist with the most convenient and economical solutions. ABB can provide new systems or upgrade your existing CEMS to include CO₂ for Green House Gas (GHG) reporting.

ABB continuous gas analyzers accurately measure emissions at very low levels to establish, maintain and prove compliance. Built for reliability, ease of maintenance, sensitivity, and flexibility, these analyzers are engineered to work with your plant's specific stream compositions and within your measurement ranges.

We welcome the opportunity to discuss your specific monitoring requirements. Our team will work with you to provide a solution that best fits your site requirements.

Maintenance Personnel

NAME

JOB TITLE

TELEPHONE NUMBER

E-MAIL

North America Customer Service Center

29801 Euclid Avenue

Wickliffe OH 44092 1832, USA

Tel: 1 800 HELP 365 (1 800 435 7365)

Option 3–Analytics/Option 1–Service

Outside USA/Canada: +1 440 585 7804

Fax: +1 440 585 5087

E-mail: NAservice_info@us.abb.com

Power and productivity
for a better world™

