



ABB MEASUREMENT & ANALYTICS

ACF5000 – The new benchmark in FTIR CEMS

Key features pocket guide





ACF5000

Best in class technology

Inherent stability of FTIR-technology

- For longest maintenance intervals
- Patented double-pivot spectrometer – Drift free, virtually no recalibration
- Non-hygroscopic beam splitter – insensitive to humidity
- Unrivalled optical component lifetime – reduced cost of ownership
- Improved algorithm for exceptional baseline stability

The difference between good and great – our ASP block

- Tightly integrated O₂ and VOC sensors – minimizes dead times and avoids leakages
- Aspirator pump without moving parts – maintenance free
- Monobloc design with homogeneous temperature profile – no cold spots

Market leading performance

- Approved according to EN 15267 and EN 14181 by
- TÜV and MCERTs
 - 6 months maintenance interval for all components
 - Lowest measurement uncertainties – suitable to monitor smallest Emission Limit Values
 - Highest number of certified gas components – prepared for future regulations
- Fully compliant to USA EPA specifications
- Internal references – allows on-going QAL3 validations
- Highest range dynamics – to monitor plant start-ups, shut-downs and upset conditions

ACF5000

From the pioneer in
FTIR CEMS

All analyzers manufactured by ABB

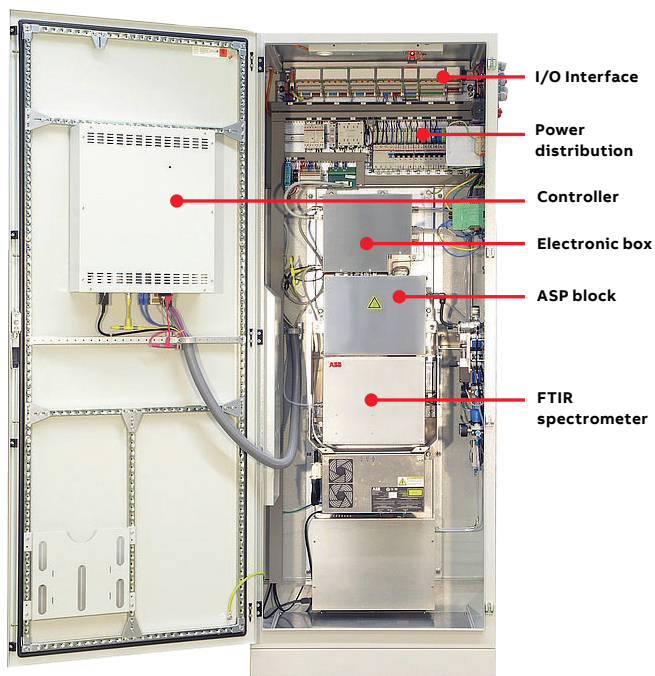
- Competence in-house
- Fourth generation of the most sold FTIR CEMS – more than 1,600 installations and more than 20 years experience
- Confidence dealing with the leading manufacturer
- ABB FTIR selected for GHG monitoring in space
- Consistent high level of service availability
- Seamless support throughout the product life



ACF5000

The unique modular design

Clear arrangement of the functional modules



ACF5000

Complete turnkey system

From sampling point to control system

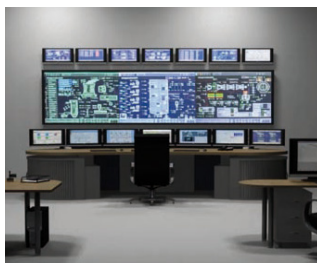
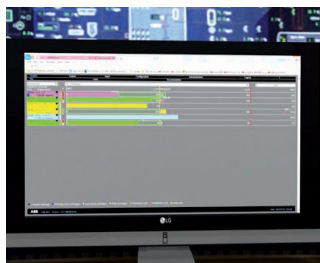
- Includes approved probe, filters and heated sample line
- Post process data with function block program

Communication features

- PROFIBUS, Modbus, OPC and Ethernet offers unlimited connectivity to PLCs, Data Acquisition Handling Systems or DCS
- Integration of external signals and communication via single line to save cabling effort
- Remote control via cellular network connection
- Analyze^{IT} Explorer maintenance software

CEM-DAS

- CEM-DAS means Continuous Emission Monitoring Data Acquisition System
- Approved according to EN 15267 and EN 14181
- Complete networkable system for the continuous recording and evaluation of emission data in all industries
- Compliant to all plants covered under the Industrial Emission Directive 2010/75/EU



ACF5000

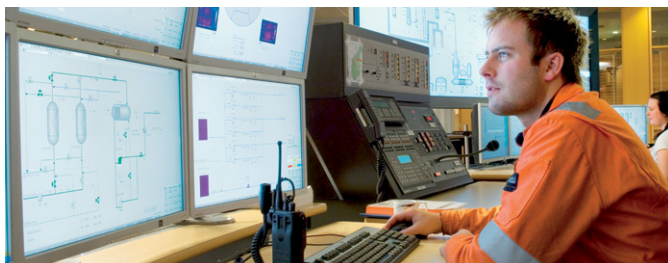
ABB measurement care

Service

- Factory certified service engineers
- Customized service contracts
- Pre-defined maintenance packages:
 - Maintenance Package A – applies after 6 and after 18 months
 - Visual check
 - Leakage test
 - Validation of all measuring components
 - Maintenance Package B – applies after 12 months before AST
 - Includes the scope of package A
 - Replacement of all wear parts based on the manual
 - Validation of all measuring – and auxiliary components
 - Maintenance Package C – applies after 24 months
 - Includes the scope of package B
 - Replacement of all O-ring gaskets
 - Commissioning

Increased availability by remote services and diagnostics

- Troubleshooting without onsite visits
- Spare part logistics with shortest delivery times
 - 24 hours option



ACF5000

Low cost of operation

- Longest maintenance interval of 6 months for all pollutants
- Save cylinder gas with internal references for QAL3 validation
- Frees operator from QAL3 reporting effort with integrated automated QAL3 procedure
- Increased availability by remote service and diagnosis

Applications

- Hazardous Waste Incinerators
 - Cement plants
 - Lime kiln
 - Thermal treatment of contaminated soils
 - Solvent recovery and destruction at pharmaceutical plants
- Municipal Waste Incinerators
 - Biomedical waste incineration
 - Waste pyrolysis
 - Gasification
- Power Plants
 - Combustion of coal and oil
 - Sludge combustion
 - Combustion of waste or sludge
 - DeNOx and HCl-scrubbers
 - Co-incineration
- Steel and aluminium smelters
- Brick, tiles and glass manufacturing
- Catalyst protection monitoring
- Combustion research



Contact

ABB Automation GmbH
Measurement & Analytics

Stierstädter Straße 5
60488 Frankfurt am Main
Germany
cga@de.abb.com

www.abb.com