

OMA-406-O2 Analyzer

Applied Analytics Data Sheet No. DS-002C — Revised 12 November 2024



Developed from decades of industry-leading experience, the OMA-406-O2 analyzer is designed from the ground up to provide dependable sulfur dioxide and oxygen analysis. By incorporating a field-proven dispersive spectrometer and an advanced paramagnetic oxygen detector with a user-friendly display, on-line analysis has never been easier.

Features

» Convenient 19" form factor that fits a standard size rack.

» Application oriented design that incorporates a dispersive spectrometer and paramagnetic oxygen detector.

» Easy to use touchscreen HMI.

» Flexible signal output options that include 4-20mA, RS-232, RS-485, and MODBUS TCP/IP.

OMA-406-O2 Analyzer

Applied Analytics Data Sheet No. DS-002C — Revised 12 November 2024

All performance specifications are subject to the assumption that the sample conditioning system and unit installation are approved by Applied Analytics. For any other arrangement, please inquire directly with Sales.

Technical Data	
General	
Detector	nova II™ spectrophotometer, paramagnetic oxygen detector
Spectrometer Light Source	Standard: pulsed xenon lamp with average 5 year life span
Fiber Optic Cables	Standard: 600 µm core 1.8-meter fiber optic cables (qty = 2)
Process Connection	1/4" tubing compression fitting (flow cell) and 1/8" tubing compression fitting (oxygen detector)
Calibration	If possible, the instrument is factory calibrated prior to shipment; Monthly calibrations are required to keep O ₂ sensor within specification. Spectrophotometer does not require calibration after the initial calibration.
Human Machine Interface	Industrial controller with touchscreen LCD display running ECLIPSE™ software
Data Storage	Solid state drive
Measuring Parameters	
Accuracy	Spectrometer: +/-2% full scale range
Response Time	Readings every 1-5 seconds
Sample Conditions	
Sample Temperature	Standard: 0 to 65 °C Contact AAI for temperatures above these ranges
Sample Pressure	Standard: -5 psig to 5 psig
Sample Medium	Gas
Flow Rate	50-200ml/min
Ambient Conditions	
Analyzer Environment	Indoor
Ambient Temperature	Standard: 0 to 35 °C (32 to 95 °F)
Ambient Altitude	-250 m to 5,000 m (-770 ft to 15,400 ft)
Physical Specifications	
Dimensions	8.90" H x 19.02" W x 14.29" D (226mm H x 483mm W x 363mm D)
Analyzer Weight	30 lbs. (14 kg)
Wetted Materials	Flow cell: fused silica, viton, 316L stainless steel Oxygen sensor: 316 stainless steel, viton, borosilicate glass, electroless nickel, platinum/iridium alloy
Electrical Requirements	85 to 264 VAC 47 to 63 Hz
Power Consumption	45 Watts
Outputs	1x galvanically isolated 4-20mA analog output per measured analyte 2x digital outputs for fault and SCS control Optional: Modbus TCP/IP; RS-232; RS-485; HART; Contact AAI for options not listed

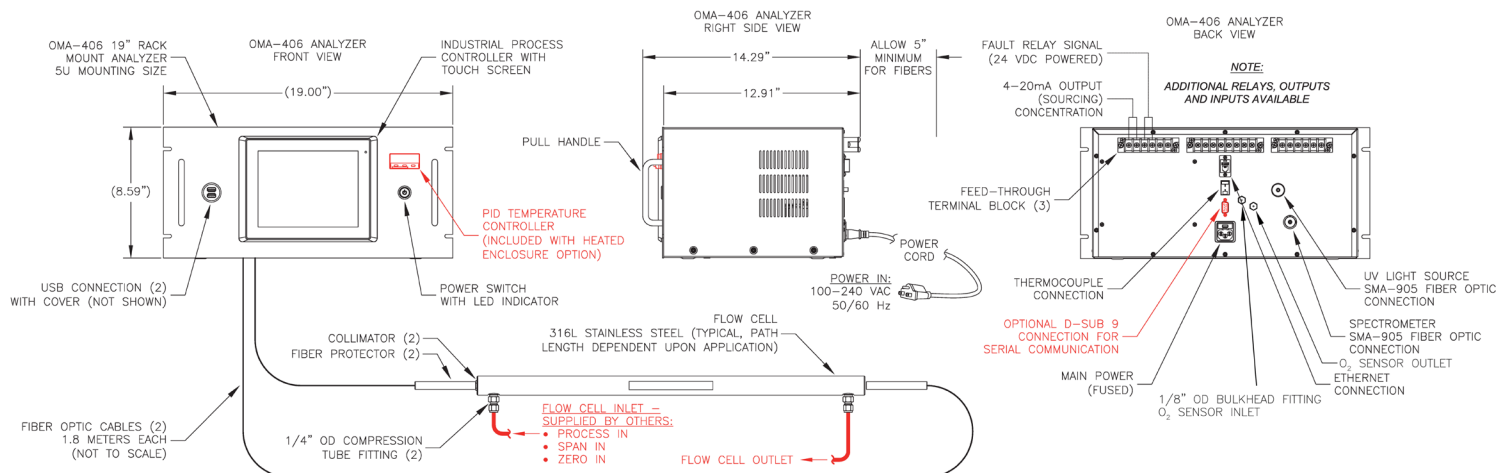
Subject to modifications. Specified product characteristics and technical data do not serve as guarantee declarations.

OMA-406-O2 Analyzer

Applied Analytics Data Sheet No. DS-002C — Revised 12 November 2024

OMA-406-O2 Technical Drawing

STANDARD OMA-406 ANALYZER COMMON OPTIONS SHOWN IN RED



www.aai.solutions

Headquarters

Applied Analytics, Inc.
Burlington, MA, USA
sales@aai.solutions

North America Sales

Applied Analytics North America, Ltd.
Houston, TX, USA
sales@appliedanalytics.us

Brazil Sales

Applied Analytics do Brasil
Rio de Janeiro, Brazil
vendas@aadbl.com.br

Europe Sales

Applied Analytics Europe, AG
Genève, Switzerland
sales@appliedanalytics.eu

Middle East Sales

Applied Analytics Oil & Gas Operations, L.L.C.
sales@appliedanalytics.ae

India Sales

Applied Analytics (India) Pte. Ltd.
sales@appliedanalytics.in

Asia Pacific Sales

Applied Analytics Asia Pte. Ltd.
Singapore
sales@appliedanalytics.com.sg

China Sales

Applied Analytics China Limited
China
sales@appliedanalytics.cn

© 2024 Applied Analytics, Inc. Products or references stated may be trademarks or registered trademarks of their respective owners. All rights reserved. We reserve the right to make technical changes or modify this document without prior notice. Regarding purchase orders, agreed-upon details shall prevail.

Applied Analytics is a registered trademark of Applied Analytics, Inc.