

Model 6020 SO₂ Analyzer

The Model 6020 SO₂ Analyzer provides an accurate and convenient means of measuring low levels of Sulfur Dioxide in ambient air.



The Model 6020 measures sulfur dioxide by detecting the fluorescence of SO₂ when exposed to ultraviolet (UV) radiation at wavelengths near 214 nm. The SO₂ molecule fluoresces (reradiates) at longer wavelengths of approximately 360 nm, which is detected and measured by a photomultiplier tube (PMT). Narrow band optical filters are used to separate the 215 nm excitation light from the 360 nm fluorescing light. The Model 6020 consists of a sample inlet, hydrocarbon scrubber (kicker), optics, UV lamp, reaction chamber, PMT, UV detector, and associated electronics.

Advanced, easy to use, menu-driven software allows access to sample conditions various diagnostics, and the visual graph for users to view a time series plot for SO₂ readings. The 6020 SO₂ Analyzer offers a bright color display, data logging capability, advanced

communications via Ethernet, USB and RS-232/485, universal power supply, and a DC internal pump for easy installment in rack systems or bench top applications.

Specifications

*Specifications subject to change without notice
All specifications are based on constant conditions*

Ranges	0-500 ppb, 0-20 ppm User set
Noise	< 0.2 ppb
Lower Detectable Limit	< 0.4 ppb
Zero Drift	< 0.5 ppb per 24 hours
Span Drift	< 0.5% of reading/24 hr
Response Time	60 seconds to 95%
Precision	<0.5% of reading
Linearity	<1 % of URL
Sample Flow Rate	0.4 to 0.8 LPM
Operating Temperature	0° to 45° C
Power Requirements	200 Watts (depends on analyzer)
Voltage Output Ranges	0.1V, 1V, 2V, 5V, 10V, user-selectable
Input/Output Ports	Rear Panel: Ethernet, USB Device, USB Host (2), RS-232/485 (2)
Physical Dimensions	5.25 in (H). x 17 in. (W) x 22.5 in.(L)
Weight	35 lbs. (20.41 kg)
Certification	US EPA: RFSA-0616-237 (SO ₂ Bench)
Display	7" Wide View Color LCD Touchscreen
Interface	Touchscreen, Front Panel Keypad, External Keyboard, Mouse
Communications	Ethernet, USB and RS-232/485 Ports, Modbus protocol, Analog I/O, Digital I/O
Features	Automatic temperature and pressure compensation, Comprehensive internal data logging
Options	Internal zero & span check Internal Pump Rack Mount Kit
Applications	Ambient Air Monitoring Roadside Air Monitoring