

## Model 6020 SO<sub>2</sub> Analyzer

***The Model 6020 SO<sub>2</sub> 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 SO<sub>2</sub> when exposed to ultraviolet (UV) radiation at wavelengths near 214 nm. The SO<sub>2</sub> 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 SO<sub>2</sub> readings. The 6020 SO<sub>2</sub> 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*

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