

DATA SHEET

# SI-AQ EXPERT

**Portable Air Quality Monitor Providing the Latest in Monitoring & Data Logging for IAQ Testing in Buildings, Hospitals, Universities, Labs, Clean Rooms, Airports and More**



## Accurate / Reliable / Robust / Fast

- Customize Up To 7 Gases
- Temp., %RH, & Barometric Pressure Included
- Real-Time Continuous Data Logging
- Active Internal Sampling Pump
- Large Internal Memory (2,000 Tests)
- Wireless Communication with PC & Printer
- Portable with Swivel Handle



Select Up to **7 Gases** in Total:  
TVOCs, CO<sub>2</sub>, CO, Formaldehyde, NO<sub>2</sub>,  
NO, O<sub>2</sub>, O<sub>3</sub> (Ozone), SO<sub>2</sub>, H<sub>2</sub>S



Long Lasting Rechargeable  
Battery & AC Charger

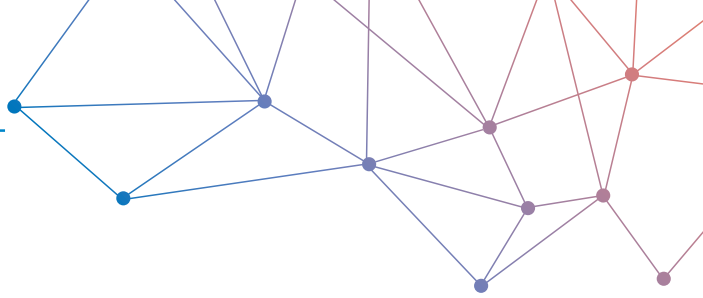


Light Weight, Durable, &  
Easy to Operate



Real Time PC Software  
& USB Cable

# SI-AQ EXPERT



## Applications



Airports



Offices



Laboratories

### Customizable for Your Application

Up to 7 different toxic gases to meet the needs of most air quality analyses

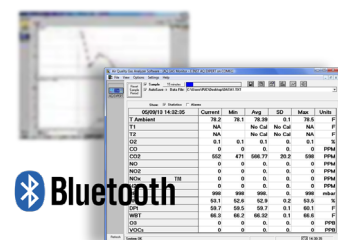
### Easy Calibration

Built-in menu driven calibration procedure

### REAL-TIME Data Logging

Save & graph data via USB or wireless Bluetooth® to your PC or tablet

- CO<sub>2</sub>
- CO
- SO<sub>2</sub>
- O<sub>2</sub>
- VOCs
- NO<sub>2</sub>
- CH<sub>2</sub>O
- NO
- H<sub>2</sub>S
- %RH



**Bluetooth**

**Si-AQ PC Software: Real-Time Data Logging Software**

Parameter	Sensor	Range	Resolution	Accuracy
Ambient Temperature	Pt100	-40 to 257 °F -40 to 125 °C	0.1 °F 0.1 °C	±0.4 °F (32 - 140 °F) ±0.4 °C (0 - 60 °C)
Relative Humidity	Capacitive	5 - 95 %	0.1 %	±2 % RH
Barometric Pressure	Piezoresistive	260 - 1260 mbar	1 mbar	±2 mbar
CO <sub>2</sub>	NDIR	0 - 5,000 ppm	1 ppm	±2 % rdg ±10 ppm
CO <sub>2</sub> High	NDIR	0 - 20 %	0.1 %	±3 % rdg
CO	Electrochemical <sup>1</sup>	0 - 200 ppm	0.1 ppm	±4 % rdg ±0.5 ppm
VOCs	PID	0 - 20,000 ppb 0 - 46,000 µg/m <sup>3</sup>	1 ppb 1 µg/m <sup>3</sup>	±10 % rdg ±20 ppb
VOCs	PID	0 - 200 ppm 0 - 460 mg/m <sup>3</sup>	1 ppm 1 mg/m <sup>3</sup>	±10 % rdg ±2 ppm
O <sub>2</sub>	Electrochemical	0 - 25 %	0.1 %	±0.1 % rdg
O <sub>3</sub> (Ozone)	Electrochemical <sup>2,3,4</sup>	0 - 5,000 ppb	1 ppb	-
H <sub>2</sub> S	Electrochemical <sup>1</sup>	0 - 100 ppm	1 ppm	±4 % rdg ±0.5 ppm
CH <sub>2</sub> O (Formaldehyde)	Electrochemical <sup>2,3</sup>	0 - 10,000 ppb	1 ppb	±5 % rdg ±50 ppb
NO	Electrochemical <sup>1</sup>	0 - 250 ppm	0.1 ppm	±4 % rdg ±0.5 ppm
NO <sub>2</sub>	Electrochemical <sup>1,4</sup>	0 - 20 ppm	0.1 ppm	±4 % rdg ±0.5 ppm
SO <sub>2</sub>	Electrochemical <sup>1,4</sup>	0 - 20 ppm	0.1 ppm	±4 % rdg ±0.5 ppm
Differential Pressure*	Piezoresistive	-40 inH <sub>2</sub> O to 40 inH <sub>2</sub> O -100 mbar to 100 mbar	0.1 inH <sub>2</sub> O 0.1 mbar	±1 % rdg
Temperature Type K T1	Tc K	0 - 2,000 °F 0 - 1,100 °C	1 °F 1 °C	5 °F / 3 °C or 2 % of rdg
Air Velocity	Calculated	0 - 300 ft/sec 0 - 91 m/s	1 ft/sec 1 m/s	-
Electromagnetic Compatibility	EN 61326-1, Portable Equipment			

### Optional Accessories



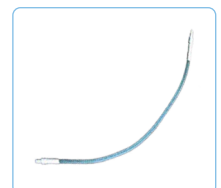
Sampling Probe  
(Si-AQ Probe with Hose)



Zero Filter for Calibration  
(Si-AQ VOC Zero Filter)



Bluetooth® Printer  
(Si-AQ Bluetooth® Printer)



Moisture Exchange Tube  
for Calibration (Si-AQ  
Moisture Exchange)



Pitot Tube for Air Velocity  
(Si-AQ Pitot Tube)



Carrying Case  
(Si-AQ Expert Vinyl Case)

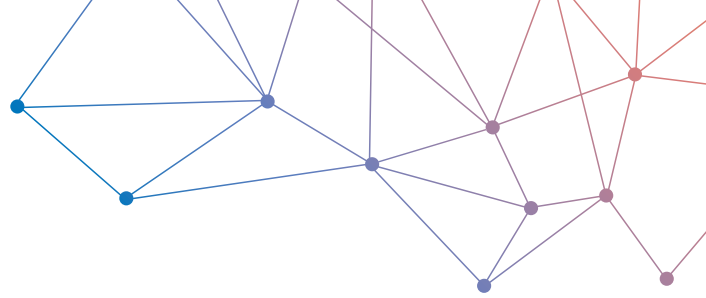
<sup>1</sup> Other ranges are available upon request

<sup>2</sup> Accuracy based on laboratory conditions

<sup>3</sup> This sensor may have interference from H<sub>2</sub>, CO, H<sub>2</sub>S and other reducing gases such as alcohols

<sup>4</sup> All three O<sub>3</sub>, NO<sub>2</sub>, & SO<sub>2</sub> sensors cannot concurrently be installed in one instrument

\* Requires connection accessories, flexible tubes and connections available as option in the Si-AQ Kit Press. Diff.



# SI-AQ EXPERT

## Ordering Code

Part # EXPERT - \_ \_ - \_ - \_ - \_

Example: EXPERT - Si-AQ CO<sub>2</sub> Sensor (5000 ppm) - Si-AQ CO Cell (0-200 ppm) - Si-AQ VOC Cell (20,000 ppb) Ambient Temp, %RH, Barometric Pressure, CO<sub>2</sub> (0-5,000 ppm), CO (0-200 ppm), VOC (0-20,000 ppb)



### All Si-AQ EXPERT Kits Include:

• Ambient Temperature, % Relative Humidity
• Barometric Pressure, Wet Bulb & Dew Point
• Continuous Internal Sampling Pump
• REAL-TIME Data Logging
• PC Software with USB Cable
• Wireless Bluetooth® & External Dongle
• Dual-Channel Tck (Differential Temperature)
• Differential Pressure
• User manual
• Swivel Handle for Easy Transport
• Rechargeable Battery & AC Charger
• Factory Calibration Certificate

### Add Up To Seven (7) Additional Sensors:

Si-AQ CO <sub>2</sub> Sensor (5000 ppm)*	CO <sub>2</sub> Sensor (0-5,000 ppm)
Si-AQ CO Cell (0-200 ppm)*	CO Sensor (0-200 ppm)
Si-AQ VOC Cell (20,000 ppb)	VOC Sensor (0-20,000 ppb)
Si-AQ VOC Cell (200 ppm)	VOC Sensor (0-200 ppm)
Si-AQ NO <sub>2</sub> Cell (0-20 ppm)*	NO <sub>2</sub> Sensor (0-20 ppm)**
Si-AQ O <sub>3</sub> Cell (0-5 ppm)	O <sub>3</sub> Sensor (0-5 ppm)**
Si-AQ H <sub>2</sub> S Cell (0-100 ppm)*	H <sub>2</sub> S Sensor (0-100 ppm)
Si-AQ O <sub>2</sub> Cell (0-25%)	O <sub>2</sub> Sensor (0-25%)
Si-AQ SO <sub>2</sub> Cell (0-20 ppm)*	SO <sub>2</sub> Sensor (0-20 ppm)**
Si-AQ NO Cell (0-250 ppm)*	NO Sensor (0-250 ppm)
Si-AQ CH <sub>2</sub> O Cell (0-10 ppm)	CH <sub>2</sub> O Sensor (0-10 ppm)

\* Other ranges are available upon request

\*\* The following sensors: O<sub>3</sub>, NO<sub>2</sub>, & SO<sub>2</sub> cannot concurrently be installed on one instrument

### Optional Accessories:

Si-AQ Expert Vinyl case	Protective Carrying Case
Si-AQ VOC Zero Filter	Ambient Air Zero Filter
Si-AQ Moisture Exchange	Moisture Exchange Tube for Calibration
Si-AQ Probe with Hose	12" (300mm) Probe, 10' (3m) Dual Hose
Si-AQ Bluetooth® Printer	Bluetooth® Printer
Si-AQ Pitot Tube	12" (300 mm) Pitot Tube (Air Velocity)
Si-AQ Diff. Press. Kit	Differential Pressure Kit



Education



Hospitals