

AQS 1 Benzene (High Range)

Specification Sheet

Real-time monitor for benzene (C₆H₆)

Benefits

- Accurate, continuous measurement of benzene 0-10 ppm.
- Low power - compatible with solar and battery fenceline applications
- Modular design easily supports additional pollutant and environmental measurements
- <15-minute measurement cycle
- Aeroqual Cloud Software provides real-time data access, automatic reporting, data analytics tools, software updates, service and calibration support, and system diagnostics
- Data analytics tools include wind rose plotting for easy data visualization
- User configurable, real-time alerting allows users to respond quickly to emission events.



Benzene Module Specifications – High Range

Range	Display Resolution	Noise at zero	Lower Detection Limit, 3σ	Precision (% of FS)	Linearity (% of FS)	Drift 24 hours Zero; Span (% of FS)
0-10 ppm	0.001 ppm	0.005 ppm	< 0.02 ppm	1%	2.9%	0.004 ppm 0.5%

Base System Specifications

Control system	Embedded PC with on board data storage (>5 years).
Communications	Standard: WIFI, Ethernet (LAN) Optional modem: Cellular IP 4G LTE, Integrated high gain antenna.
Software	Compatible with Aeroqual Cloud and OneView Software.
Measurement interval	1 minute data update (15-minute measurement cycle for benzene). User selectable averaging, up to 24 hr.
Power requirements	100-260 VAC or 9-36VDC battery/solar: Power usage: 13 W. Compatible with Victron SmartSolar MMPT 100-20 (solar charge controller).
Enclosure	Lockable IP65 GRP cabinet with integrated aluminum solar shield armor.
Dimensions	685 mm x 330 mm x 187 mm (27" x 13" x 73/8") - includes gas inlet.
Weight	< 13 kg (28.6 lbs)
Operating range	-10 °C to +45 °C (14 °F to 113 °F) Low temperature operation extendable with winterization pack (-40 °C).
Mounting	Pole, tripod, and wall mounting brackets available.
Environmental sensor options	Gill WindSonic (ultrasonic wind sensor), Vaisala WXT536 (weather transmitter), Airmar 200WX (weather station).
Inputs/Outputs	0-5V analog input, 4-20mA input, configurable relay output

Benzene System Specifications

Inlet	Inert glass-coated stainless steel and Teflon sample inlet
Pump	Long life 12 V brushless DC diaphragm pump
Module technology	Temperature programmed desorption with PID detector for speciated concentration measurements of benzene.