SERIES 900/930/940

Series 900

Series 930
Shown with optional LED display, strobe and siren

Series 940
Shown with optional LED display

Aeroqual fixed indoor air quality monitors are designed to make indoor air quality monitoring easy. They are used by researchers, professionals, and non-experts alike to gather indoor air quality data from indoor environments, and commercially for ozone generator control, process control, monitoring controlled atmospheres, air quality, and health and safety compliance.

Monitors at a glance

Feature / Series	900	930	940
Active sampling via internal sensor head fan	✓	✓	
Active sampling via Teflon® tubing (up to 5m) and diaphragm pump (0.2 +/-0.1 LPM)			✓
PC data logging and real-time network capability	✓	✓	✓
Multiple analogue and digital outputs	✓	✓	✓
Interchangeable sensor heads	All gases	Some gases	O_3 Only
Enclosure – IP41 & NEMA 2 equivalent		✓	✓
Options			
Temperature and RH sensor	✓	✓	✓
Large LED display		✓	✓
Strobe and siren			✓

Sensors

Aeroqual uses a unique system of interchangeable sensor heads making it simple to replace one sensor head for another.

Gas* / Application Type**	ENV	IAQ	IND	900	930	940
Ammonia (NH_3)			✓	✓	*	
Carbon monoxide (CO)	✓	✓	✓	✓	*	
Carbon dioxide (CO_2)	✓	✓	✓	✓		
Chlorine (Cl_2)				✓	✓	
Formaldehyde (CH_2O)				✓	✓	
Hydrogen (H_2)			✓	✓		
Methane (CH_4)			✓	✓	✓	
Hydrogen sulphide (H_2S)	✓		✓	✓		
Nitrogen dioxide (NO_2)	✓			✓		
Non methane hydrocarbon (NMHC)	✓			✓		
Ozone (O_3)	✓	✓	✓	✓	✓	*
Perchloroethylene (C_2Cl_4)		✓	✓	✓		
Sulphur dioxide (SO_2)	✓		✓	✓	✓	
Volatile organic compounds (VOC)	✓		✓	✓	*	

* Refer to the separate gas sensor specification sheet for the full range of sensors.
**Application type: ENV = outdoor environmental monitoring, IAQ = indoor air quality, IND = industrial health and safety.

Specifications

Feature / Series	Series 900	Series 930	Series 940
Applications	Ozone generator control, ambient & indoor air quality, monitoring and control, real-time network monitoring, health and safety and process control.	Industrial applications for gas leak detection, monitoring and control, real-time network monitoring, health and safety and process control.	Environments with pressure and flow fluctuations, controlled atmospheres, low 0_2 (Oxygen) environments, outdoor air sampling.
Measurement units	Gas: ppm or mg/m^3 | Humidity: % | Temperature ℃ or ºF		
Reading functions	Instant, minimum, maximum, average		
Sensor head type	 Type 1 Interchangeable	 Type 2 Removable / Replaceable	 Type 3 Removable / replaceable
Sampling method	Active sampling via internal sensor head fan	Active sampling via internal sensor head fan	Active sampling via diaphragm pump with long life brushless DC motor
Analog output	4-20mA (opto-isolated), 10-30V	4-20mA (opto-isolated), 12-24V	4-20mA (opto-isolated), 12-24V
External signal type	Transistor outputs (4)	Transistor output (24 DC at 150 mA max)	Transistor output (24 DC at 150 mA max)
External signal functions	Low Alarm | High Alarm | Control | Diagnostics		
Inputs	Standby toggle		
Communication	RS485 (Aeroqual proprietary protocol)		
Jumpers	J1, J2, J3 termination resistors		
Connectors	Screw type		
Monitor Identification (ID)	1 (Default) User configurable from 1 to 255		
Alarm set points	User Configurable Low Alarm | High Alarm		
Control set point	User Configurable Low Alarm | High Alarm		
Configuration software	PC Configuration Software		
Interface (optional)	RS-485 to USB cable	RS-485 to USB cable	RS-485 to USB cable
PC data logging (Windows 7, 8, XP)	Link data to a specific location and monitor with free software (Data cable required)		
Power (user supplied)	Regulated 12V DC, 800mA	24V DC, 500mA (range 22-24V DC)	24V DC, 500mA (range 22-24V DC)
Enclosure material and rating	Polycarbonate | IP20 NEMA 1 equivalent	Polycarbonate | IP41 NEMA 2 equivalent	Polycarbonate | IP41 NEMA 2 equivalent
Size (with sensor head) (lL x W x H)	64 H x 130 ∅ mm; 2½ x 5⅛ in	180 x 110 x 90 mm 7 ⅛ x 4¾ x 3½ in	230 x 140 x 95 mm 9 x 5½ x 3¾ in
Weight (Incl. Sensor)	< 200 g; < 7 oz	< 850 g; < 30 oz	< 1100 g; < 1 lb 3 oz
Environmental operating conditions	-5℃ and +45℃; (23℉ and 113℉); Relative humidity range: Determined by sensor specification		
Approvals	Part 15 of FCC Rules; EN 50082-1: 1997; EN 50081-1: 1992		

Optional accessories

Temperature/ RH Sensor
FM TRH01

Monitor RS485 to USB Cable
AS R17

Integrated display (930/940)
FM DISP01

Siren & strobe (930 Only)
AS R23D

5 micron hydrophobic
12 Pack of Filters (940 Only)
AS R65