AERO50RC

Ultra Zero Air Generator for CEM & AQMS

Leman Instruments

DESCRIPTION:

LEMAN Instruments designed the AERO50RC product line of Zero Air Generators to supply an independent, continuous source of high-purity air for Continuous Emission Monitoring (CEM) and Air Quality Monitoring System (AQMS) analyzers, in an elegant 19″ casing with a full-colour display and touchpad.

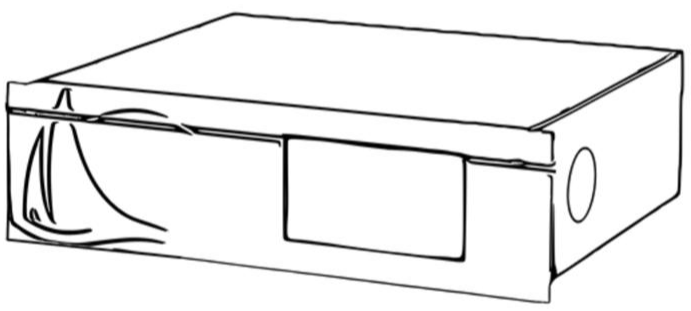
Compressed air, produced by the onboard compressor, is first filtered to 5µm and partially dried, then passed through a hot catalytic chamber to remove CO, CH4 and HC. Based on Pressure Swing Adsorption (PSA) technology, the air then passes through molecular-sieve and activated-charcoal filters to be dried and cleaned of remaining HC traces. After purification, the air is filtered to 0.01µm and the pressure regulated to the set value.

The AERO50RC delivers a fixed outflow of 2.5 L/min Zero Air, available 24/7 at constant purity, with an Ethernet interface to build a flexible gas network with local or central control.



APPLICATION TYPES:

- Zero air / span gas for CEM & AQMS gas analyzers
- Combustion air for FID-based THC CEMS
- Dilution gas for extractive / dilution CEM systems
- Instrument air for AQMS shelters and analyzer racks



FEATURES:

- Reduces operating costs — return on investment within 15 months.
- Zero Air available 24/7 at constant purity for CEM/AQMS analyzers. No contamination.
- Onboard compressor — fully independent air source.
- Does not require complex piping; easily rack-mounted or relocated.
- Long life.
- Very safe operation: internal leak-test, automatic shutdown, over-temperature protection.
- No handling, no storage, no cylinder rental fee.



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MODELS	AERO50RC
LPM Outflow @1013 hPa / 20°C	2.5 LPM
AIR purity	<10ppm H2O · <0.5ppm HC · <0.5ppm CO and CH4 · particulates <0.01µm
Dew point	<10ppm H2O
Outlet Pressure	From 0.5 to 5 bar (7 to 72 psig)
AIR pressure	N/A (on-board compressor)
Dimensions cm / in	L: 55cm / l: 41.5cm / H: 12cm (3U) L: 21.6in / l: 16.1in / H: 4.7in (3U)
Net weight (kg/lbs)	19kg / 41lbs

Compressed Air	On board compressor
Manual control	Through a 7" TFT-LCD colour display with a touchpad on the front panel. Intuitive navigation to functions by menus and sub-menus.
Remote control, Communications	Through Ethernet 10/100 network RJ45
Output fitting	Stainless steel, 1/8" compression
Power supply	Automatic switching from 90 to 260 VAC, 47 to 63 Hz
Power consumption (max at full flow)	Maximum 450W*
Ambient Temperature	+10 to +35°C