



Leman Instruments

SWISS TECHNOLOGY

AERO40R – HIGH PURITY ZERO AIR GENERATOR



AIR

APPLICATIONS

- ✓ Combustion gas for FID & GC
- ✓ Zero gas for HC calibrators
- ✓ Carrier gas for permeation tube systems

DESCRIPTION

LEMAN-Instruments designed the **AERO40R** product line of **High Purity Zero AIR Generator**, to fit almost any type of application which needs independent supply of high purity AIR close to the consumer in an elegant 19" steel casing with full color display and touchscreen.

Compressed Air is first filtered from particulates down to 5µm and partially dried; then passes throughout a hot catalytic chamber to remove CO, CH₄ and HC. Based on the field proven Pressure Swing Adsorption (PSA) technology, AIR passes through a set of filters filled up with molecular sieve and activated charcoal, to be dried and cleaned from the last traces of HC.

After the purification process, Air is filtered of remaining particulates down to 0.1µm and pressure is regulated to the set value, between 0.5 and 7 bar.(7 to 100 psig).

Models with outflows of **1.5, 3, 5 and 10 L/min** AIR are available.

Each instrument is equipped with high performance communication interfaces USB, RS485 and Ethernet as option to create a very flexible gas network with local or central control.

Due to the software being focused on safety, automatic regulation and intuitive and reliable communications, the **AERO40R** are easy to install, reliable, safe and pleasant to operate.

BENEFITS

- ✓ Reduces in operation costs. Return on investment within 15months.
- ✓ Improves resolution and detection limit. Provides High pressure stability.
- ✓ ZERO AIR available 24/7 at constant purity. No contamination.
- ✓ Independent source of High Purity AIR. Does not require any piping. Can be easily moved around the laboratory.
- ✓ Low noise < 45dB(A)).
- ✓ Very safe operation, internal leak-test, automatic shut-down, protection against over-temperature.
- ✓ No handling, No storage, No cylinder rental fee.

AERO40R

SPECIFICATIONS

Models	AERO 40R-1.5, AERO40R-3, AERO 40R-5, AERO40R-10
AIR Outflow @ 1013/20°C	AERO40R-1.5 = 1.5 L/min ; AERO40R-3 = 3 L/min ; AERO40R-5 = 5 L/min ; AERO40R-10 = 10 L/min
Output AIR purity	<ul style="list-style-type: none">▪ < 400ppm H₂O (<-30°C DP / -28°F DP), if input Air is according ISO8573-1/3▪ < 0.05 ppm HC▪ < 0.05 ppm CO and CH₄▪ particulates <0.1µm
Output Pressure	Adjustable from 0.5 to 8 bar. (7 to 120psig)
Input compressed Air	Supplied by external source, dried and oil free according to DIN ISO8578-3
Manual control	Through a 4.3" TFT-LCD color display with touchscreen, located on the front panel. Display of major parameters, functioning status and alarms. Intuitive navigation to functions by menus and sub menus.
Remote control	<ul style="list-style-type: none">■ USB, RS485 (Mod-Bus) or Display.■ Trough Ethernet 10/100 network (option)■ Log book download by USB.
Sound pressure	< 45 dB(A), measured at 1m
Ambient Temperature	+10 to +35°C
Outlet fitting	Stainless steel 1/8" or ¼"compression
Power supply	From 90VAC to 260VAC, 47 to 63 Hz
Power consumption	AERO40R-1.5 to -5 : max. 250W; AERO40R-10 : max. 500W
Dimensions	W=483mm/19ins, H=132mm/5.2ins (3U), D=520mm/21ins
Weight (net)	AERO40R-1.5 :19Kg; AERO40R-3 &-5 :23Kg ; AERO40R-10 :27Kg
Certification	CE

ORDERING NUMBERS

Model	Article #
AERO40R-1.5	724121
AERO40R-3	724122
AERO40R-5	724123

Model	Article #
AERO40R-10	724125

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