AIEQS
Arka Behbood Farayand (LLC)
Process Devlopment

NDIR GAS ANALYZER

GA9291

CO, CO2, HC, O2, NO

2026 NEW

OIML Class 0

Highlights:

- 4&5 gas measuring models
- Paramagnetic and electro chemical cells connectable (for O2, NO)
- no moving parts for zero abrasion and wear
- temperature and pressure compensation, reference channel for maximum precision
- energy saving & combustion control for Engines
- reduce emission
- Lambda Calculation

ویژگیها :

- در دو مدل ۴ و ۵ گازه
- استفاده از متدهای پارامگنتیک و الکتروشیمیایی جهت گاز های O2,NO
- بدون موتور چاپر و قطعه متحرک
- دارای تصحیح فشار و دما برای مقادیر اندازه گیری
- بهینه سازی فرآیند احتراق موتور و صرفه جویی در مصرف انرژی
- کاهش انتشار آلاینده های زیست محیطی
- محاسبه لامبدا

Product Details:

	Resolution	max. range	Type of Sensor
CO	0,001 % Vol	0 – 10 Vol%	NDIR[1]
CO2	0,01 % Vol	0 – 20 Vol%	NDIR
HC[2]	1 ppm vol	0 – 2500 ppm	NDIR
O2	0,01 % Vol	0 – 25 Vol%	EC[3]
NO	1 ppm vol	0 – 5000 ppm	EC

Notes:

1- None Dispersive Infra-Red method
2- HC as C_3H_6 or C_6H_{14}
3- Electrochemical
4- Life time 1-2 years depends on sample condition and concentration and number of tests

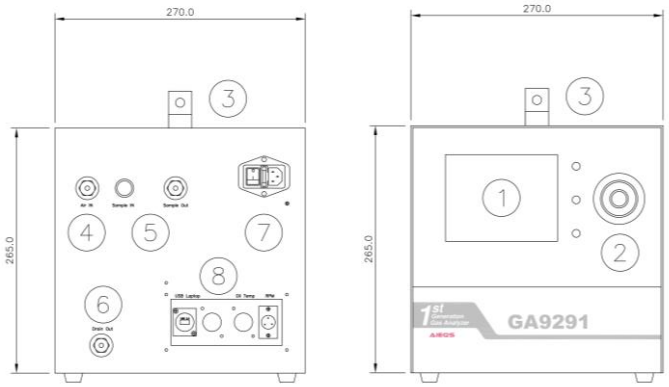
کاربرد ها :

- معاینه فنی خودرو توسط مراکز معاینه فنی خودرو
- معاینه فنی خودرو توسط سازمان محیط زیست
- معاینه فنی خودرو توسط شهرداری ها

Applications:

Car Exhaust inspection test for Car inspection test centers and DOE (Department of environments) And Others

1 Pictures



1	Touch screen Display and LEDs for Status
2	Filter
3	Handle
4	Air IN
5	Sample IN/OUT
6	Drain OUT
7	Power Cable & Fuse
8	RPM/Oil temp/USB Laptop

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Technical Information for GA92 V1

1 Technical Data of NDIR sensor

Influencing effects

Influence of the mains voltage:	< 0.5 % of the measuring interval with mains fluctuations in the range of + 2 % and a frequency variation of ± 2 Hz
Influence of the air pressure:	< 0.2 % of the measuring interval per 10 hPa (in the range of 860 - 1160 hPa)
Influence of the temperature:	< 1,5 % of the measured value/10 K (in the range of +5 C - 45 C related of 20°C)

Ambient conditions

	Storage	Operating conditions
Temperature:	-25 - +70 C	+5 - +55 C
Air pressure:	700 - 1160 hPa	860 - 1160 hPa

Operating voltage: + 5 V (+/- 0,25V) m a x . 200mA
Warm-up period: 2 min

T90 times

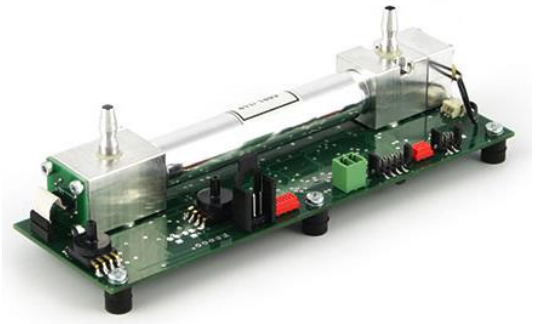
IR components	T95	< 10s	if flow	> 90l/h
O2	T95	< 60s	if flow	> 90l/h

Measurement conditions

Measuring gas flow rate min. 30l/h max. 120l/h
Measuring gas pressure: pressure must be constant, the gas must flow out freely
Measuring gas temperature: min. 5°C max 45°C, no condensate

2 Technical Data of Other Sensors

NDIR



non-dispersive infrared
(NDIR) for measure of gases CO, CO2, HC
See details in section 1

Manufacturer
SAXON JUNKALOR GmbH Germany

EC Sensor

Oxygen Measuring Range
O2: 0 – 25 Vol%

NO Measuring Range
0 – 5000 ppm

Manufacturer
SAXON JUNKALOR GmbH Germany

Sensor life time
1-2 years depends on sample condition

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