


SERVOMEX 1900IR

INFRARED ANALYSER

A robust, intrinsically safe instrument for use in areas at risk from explosive atmospheres

- Zone 1 hazardous area ATEX Cat 2, IECEx and 
- Low material and running costs with no purge
- Easy to install and simple to use
- For use with flammable samples
- Solvent resistant version available *
- Typical applications include **
 - refineries
 - ethylene plants
 - natural gas
 - various petrochemical and chemical plants
 - HyCO



SPECIFICATION

GASES MEASURED:	CO ₂ Standard	CO ₂ Solvent resistant	CO Standard	CH ₄ Standard
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TECHNOLOGY:	Infrared
HAZARDOUS AREA:	ATEX Cat 2 IECEX CSA (USA & Canada)

PERFORMANCE:	CO ₂ Standard	CO ₂ Solvent resistant	CO Standard	CH ₄ Standard
Ranges:	0-50%	✓		
	0-25%	✓		
	0-10%	✓	✓	
	0-5%	✓	✓	✓
	0-2.5%	✓	✓	
	0-1%	✓	✓	


Accuracy (intrinsic error):	<1% FSR
Response time (T ₉₀):	<10 seconds
Zero drift/week:	<1% FSR
Repeatability:	<1% FSR
Ambient temperature influence:	<1% FSR per 10°C (18°F) change over a maximum change of 10°C (18°F) per hour

PHYSICAL:	
Dimensions (W x D x H):	447mm x 227mm x 235mm (17.6" x 8.9" x 9.3")
Weight:	26Kg to 39Kg (57.3lbs to 86lbs)
IP rating:	IP65


- * Solvent resistant versions are configured with stainless steel pipework. When selecting internal filter the appropriate seal will be applied.
- ** Consult with Servomex for application guidance. Background gas information will be required for specification.

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Hazardous Area Approvals

ATEX:  II 2G, Ex ia d IIC T4 (-10°C ≤ Ta ≤ +50°C)
(+14°F ≤ Ta ≤ +122°F)

IECEX: Ex d ia IIC T4 (-10°C ≤ Ta ≤ +50°C)
(+14°F ≤ Ta ≤ +122°F)

USA/Canada:  Class I, Div 1, Groups A,B,C,D T4
Class I, Zone 1, Ex ia d IIC T4
Class I, Zone 1, AEx ia d IIC T4
(-10°C ≤ Ta ≤ +50°C)
(+14°F ≤ Ta ≤ +122°F)

EC Directive Compliance

The 1900IR complies with the following EC Directives:
Electromagnetic Compatibility Directive (89/336/EEC as amended by 92/31/EEC and 93/68/EEC)

Atex Directive (94/9/EC)

Operating Environment

Temperature: Operating: -10°C to +50°C
(+14°F to +122°F)
Storage: -20°C to +60°C
(+40°F to +140°F)

Relative humidity: 0-95% RH, non-condensing

Warm up time: Typically <5 hours (at 20°C ambient (68°F))
depending on application and environment

Sample Gas

Clean, dry at ambient temperature and free from particulates <0.6µm

Dew point: 5°C (41°F) below ambient temperature

Pressure:[†] 0.3 - 0.4 KPa gauge (0.04 - 0.05 psig)

Flow rates:[†] Standard: 50 to 250ml/min
Optional bypass: 50 to 70 l/hr
(60 l/hr nominal)

Sample connection: 1/8" NPT female

Sample wetted materials for IR version only: 316 stainless steel, sapphire, gold, nickel, epoxy adhesive (EPO-TEK H72), Viton®

[†] The pressure and flow of sample gases must be externally regulated to meet the above requirements

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Servomex has a policy of constant product improvement and reserves the right to change specifications without notice.
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