AMETEK® PROCESS INSTRUMENTS

PROCESS

Model IPS-4 NDIR Analyzer

With NDIR Platform and Integrated Sampling Conditioning

Finding the right process on-line analyzer for your application can be a time consuming experience. Users are looking for cost effective, low-maintenance solutions for on-line process gas analysis. AMETEK has been offering such customized solutions to meet your specific application needs for well over four decades. The IPS-4 NDIR analyzer, built on our field proven IPS-4 UV-VIS platform, offers unparalleled reliability, enhanced analog and digital connectivity all in a nicely packaged field installable unit. The analyzer is easy-to-use and is durable enough to be installed in outdoor, wash-down, hazardous, and environmentally harsh locations. The integrated sample conditioning makes the analyzer installation simple and easy to maintain. There are three basic versions - UV, IR and the full spectrum version with the capability in UV and IR.

Features

- **Multiple Gas Capability**
  CO, CO_2, CH_4, H_2O, and more
- **Analog and Digital Connectivity**
  Modbus, Ethernet and Web browser-based interface
- **NEMA 4 Enclosure Houses All Components**
  Designed for outdoor installation; no exposed components
- **Fully Integrated Sample Conditioning**
  No need for site integration



Why AMETEK?

Worldwide Support

- Sales and service support through a network of direct and factory-trained global distribution channels
- Factory, on-site training courses offered throughout the year
- 24/7/365 AMETEK Service Assistance Program

Process Gas Analysis ... Core Competency

- Providing process instrumentation to industry since 1962
- Widest range of analysis technology in the industry

Unique Solutions

- Custom-designed solutions to meet the needs of your application or process
- Process application consulting available

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Performance Specifications

Analyzer Range: ppm to 100% depending upon specific application

Linearity (independent)[1]: <1% full scale range

Measurement Accuracy[1]: <1% full scale range (application specific)

Repeatability[1]: <1% full scale range (application specific)

Stability[1]: 0.5% of full scale range

Zero Drift: <1.0% of full scale range over 24 hours

Response Time: <2 seconds photometric response, <30 seconds to T90

Components: up to 5 components can be measured

Inputs:

2 non-isolated analog inputs (0-5V, 0/4-20mA)

2 optically isolated discrete DC inputs

22 key piezoelectric keypad

Outputs:

265 x 64 pixel vacuum fluorescent display with multi-lingual capability (language options include English, Spanish, French, German, Russian. This is a partial listing. Contact AMETEK for more information)

2 isolated analog outputs (0/4-20 mA) (Two additional analog outputs optional)

8 dry relay contacts (NO, 100VA, 240 V)

RS485 isolated (supports MODBUS RTU)

RS232 non-isolated

Fast Ethernet (IEE802.3)

Sample System Limits:

Sample Pressure: Up to 100 barg (1450 psig) for some configurations

Oven Temperature: Oven heater capable of maintaining 150°C (300°F)

Utility Requirements:

Electrical:
120 VAC (105 to 132 VAC), 47 to 63 Hz

240 VAC (209 to 264 VAC), 47 to 63 Hz

Power Consumption:
<700 W with oven heater

<300 W without oven heater

Instrument Air: 4.8-6.9 barg (70-100 psig)

Environmental Requirements:

Ambient Temperature: -20° to 50°C (-4° to 122°F)

Ingress protection:
IP65 and NEMA 4X

Enclosure Material: stainless steel

Physical Dimensions:

General purpose model:

(W x H x D): 78 cm x 53 cm x 30 cm (30.7" x 20.9" x 11.8")

Weight: 66 kg (145 lb.) for base system

Approvals and Certifications:

NEC/CEC and CE General Safety requirements.

Hazardous area requirements:

General purpose model:

NEC/CEC Class I Div 2
Groups A,B,C,D, Class II Div 2
Groups F,G, and Class III
NEC CL I Z2 AEx nA IIC T3
CL II Z2 AEx nA T3
CEC Ex nA IIC T3

Div 1 option:

NEC/CEC Class I Div 1
Groups A,B,C,D, Class II Div 1
Groups F,G, and Class III

Zone 1 option:

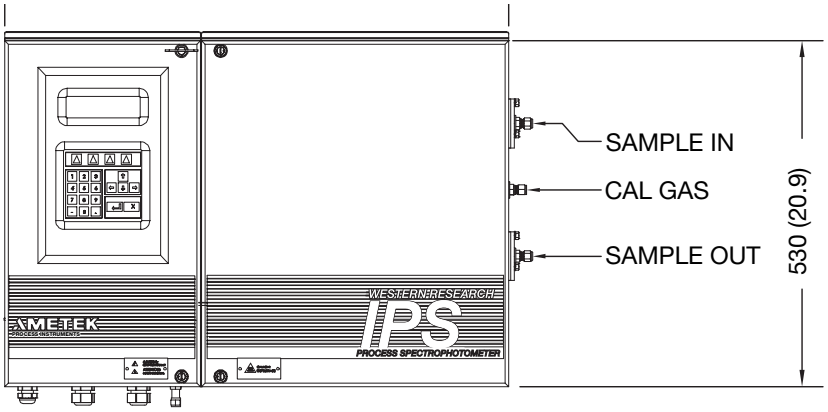
NEC CL I Z1 AEx d px IIC T3
CEC Ex d p IIC T3

II 2 G ATEX Ex d px IIC T3

Zone 2 option:

3 G ATEX Ex nA IIC T3

1. These specifications are based on normal operation of the analyzer as described in the manual supplement. Normal analyzer operation may include periodic zeroing and spanning.



FRONT VIEW

General purpose model shown

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PROCESS INSTRUMENTS

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One of a family of innovative process analyzer solutions from AMETEK Process Instruments.
Specifications subject to change without notice.

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