

J22 TDLAS Gas Analyzer

Proven technology for accurate and reliable measurement of H₂O in natural gas



More information and current pricing:

www.fi.endress.com/J22

Benefits:

- Ensures highest availability for production, transmission, storage and distribution of natural gas
- User-friendly interface with intuitive menu and web server software
- Integrated diagnostic and verification with Heartbeat Technology
- Automatically-stored historical data and spectrum logging
- NIST-traceable calibration providing superior accuracy and repeatability
- Robust design for easy installation, commissioning, and repair
- Field serviceable components and modules for minimal downtime

Specs at a glance

- **Measured Variables** Concentration Dew Point Cell Pressure Cell Temperature
- **Hazardous area approvals** ATEX / IECEx Zone 1 UKEx Zone 1 CSA Class I, Division 1 CSA Class I, Zone 1

Field of application: The J22 Gas Analyzer uses patented tunable diode laser absorption spectroscopy (TDLAS) technology to provide accurate measurement of H₂O in natural gas. Featuring the reliable diagnostic capabilities of Heartbeat Technology, the J22 analyzer determines the concentration of a gas without coming into physical contact with streams. It allows pipeline operators and suppliers to meet quality specifications, prevent pipeline corrosion, and stop hydrate formation to ensure safety and asset integrity.

Features and specifications

H2O

Measuring principle

TDLAS

Product Headline

Best-in-class gas analyzer for moisture (H2O) that is exceptionally reliable and tailored for the natural gas industry. The sensor measures gas using a Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the gas without coming into physical contact with the stream. Heartbeat Technology ensures compliance and process safety at all times.

Channels

1

Analyte and Measurement ranges

H2O (Moisture): 0-50 to 0-6000 ppmv

Measured Variables

Concentration

Dew Point

Cell Pressure

Cell Temperature

Ambient Temperature range

-20 to 60°C (-4 to 140°F)

Operating Pressure range

Inlet Pressure: 140-310 kPa (20-45 psig)

Sample Cell: 800-1200 mbara or 800-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel

FKM O-Rings

Glass

Power supply

Without heater: 24 VDC \pm 20% or 100 to 240 VAC \pm 10%, 50/60 Hz, 10W

With optional heater: 100 to 240 VAC \pm 10%, 50/60 Hz, 80W

H2O

Communication

Service webserver interface: Ethernet RJ45

I/O1: Modbus RTU over RS485

I/O2 and 3: Relay output OR Universal I/O (UIO); UIO can be configured as analog output (4-20 mA) or digital/status output

Housing materials

Electronics: Copper-free aluminum

Sample System Enclosure: 304 Stainless Steel

Sample System Panel: Anodized aluminum

Hazardous area approvals

ATEX / IECEx Zone 1

UKEx Zone 1

CSA Class I, Division 1

CSA Class I, Zone 1

Degree of protection

IP66, Type 4X

Product safety

CE

RCM

FCC

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