

# GEDRA®

**GEDRA** (Gas Energy Density Raman Analyser) is a **real time gas analyser** tailored for natural gas, biomethane, and hydrogen analysis. The decarbonization of gas supply and subsequent reconfiguration of gas flows through the grid will substantially affect the gas network operator business. The shared goal is to increase the use of alternative green gas sources such as biogas, biomethane and hydrogen-enriched natural gas. In this future with a such **heterogeneous gas network**, GEDRA will play a crucial role on the way to renewables in **monitoring fundamental gas parameters**. It measure a wide range of gas mixtures without any hardware reconfiguration or any needs of consumable supplies, ready for remote monitoring and control. Designed to **withstand harsh environmental conditions**, GEDRA can be installed **anywhere** along the gas pipelines, including **remote unmanned locations**. Thanks to its peculiar features, it represents an effective alternative to gas chromatographs for monitoring calorific value.



City gates



Heavy industry

Features	Values
Accuracy (OIML R 140)	class A (0.5 %)
Pressure range	see "Figure 1 Installation scheme"
Flow rate	max 180 NL/h
Temperature range	from -20 °C to +50 °C from -4 °F to +122°F
Power supply	24 VDC   220 VAC
Power consumption	average 30 W
Communication ports	<ul style="list-style-type: none"> <li>• 2x Ethernet</li> <li>• 4x Serial (RS 485)</li> </ul>
Lower limit of quantification (LOQ)	500 ppm
Communication interfaces	<ul style="list-style-type: none"> <li>• Modbus ASCII according to UNI 11885</li> <li>• Integrated web server</li> <li>• Field display (available upon request)</li> </ul>
Detectable compounds	Methane; heavier hydrocarbons (ethane, propane, butanes, n-butane, i-butane); nitrogen; carbon dioxide; hydrogen
Installation in hazardous area	Zone 1, II B+H2, T6   Zone 1, II C, T6

**NOTE:** Different functional features available on request.

**Table 1** Features

**GEDRA** is designed according to UNI 9167-3 and UNI 1776.

Calorific values and other quantities are calculated according to ISO 6976:2016.

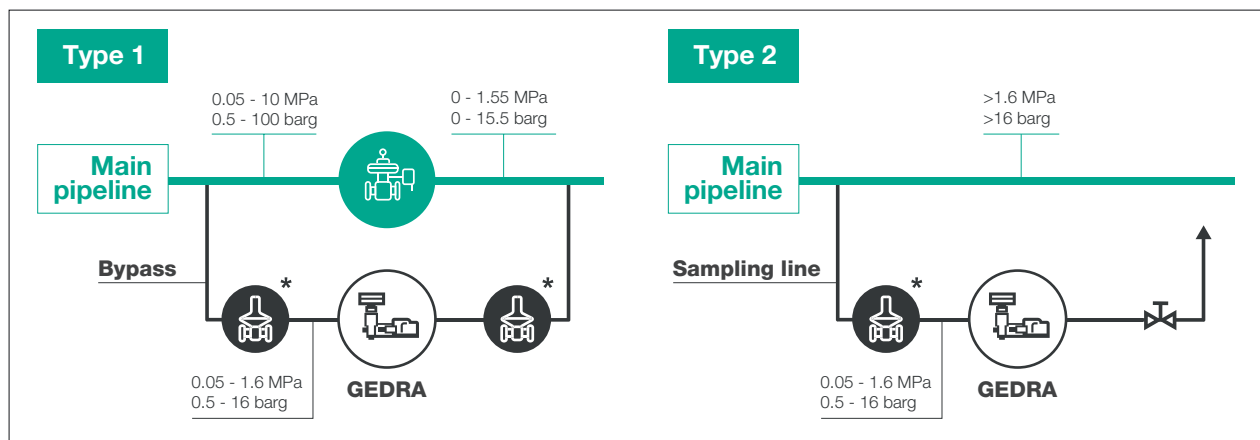
The product is certified according to European Directives 2014/34/EU (ATEX) (pending), 2004/22/CE (EMC) (pending), 2014/35/EU (LVD) (pending), OIML R140 and European Directive 2004/22/CE (WELLMEC 7.2) (pending).



## GEDRA competitive advantages

- High accuracy
- Fast response time
- High repeatability
- H<sub>2</sub> ready
- No carrier gas  
No calibration gas mix
- No gas release in atmosphere  
with installation type 1
- In-line installation

## Installation schemes



\* To be defined according to the use case

**Figure 1** Installation scheme