

## GM901 Carbon Monoxide Analyzer

CO Measurement for the Emission Monitoring and the Process Control

### Cross Stack or Probe technology?

The GM901 Analyzer is available in the device versions “cross duct” and “measuring probe”. As a result it is suited to a broad range of applications – even for difficult measuring tasks such as high dust loads, overpressure, critical flow profiles or high measuring gas concentrations.

### Field of Applications

- Power plants
- Coal processing industry
- Cement industry
- Waste incineration plants
- Paper and pharmaceutical industry
- Steel and glass industry
- Chemical and food industry

### Overview

- GM901 Cross stack with the components:
  - sender with weatherproof cover
  - receiver with weatherproof cover
  - evaluation unit
- GM901 probe version with:
  - sender/receiver unit
  - GPP measuring probe (gas permeable probe; verifiable using test gases) or
  - GMP probe (open aperture; purge air supply necessary)
  - evaluation unit

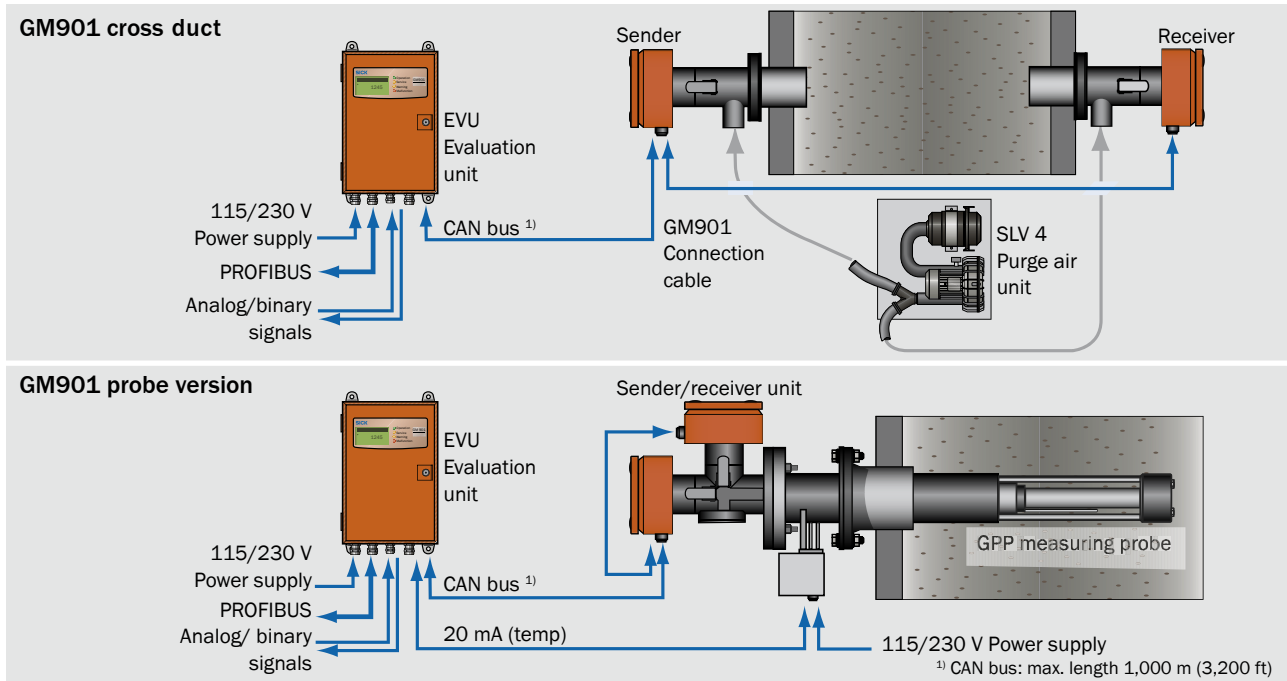
### Options

- PROFIBUS
- Optical alignment unit, CO test cells, mounting flange, PT100 sensor
- Purge air unit for cross duct version and GMP probe for cooling and/or protection of the sender and receiver



### Key Features

- Rapid, easy installation, commission and project planning
- Verifiable with test gases (GPP probe) or filled test cells
- User-friendly operation directly on the evaluation unit
- Measuring values, measuring range and limit value indication directly on the graphical display
- Extremely low maintenance requirements
- No test gases necessary
- Evaluation unit can be installed up to a distance of 1,000 m (3,200 ft) from the meas. point



Technical Data	GM901-05	GM901-02	
<b>Measuring parameters</b>	<b>Cross duct</b>	<b>GMP measuring probe</b>	<b>GPP measuring probe</b>
Measuring principle	Gas filter correlation		
Measuring components	CO		
Available measuring range	<ul style="list-style-type: none"> <li>• 0 ... 500 ppm x m</li> <li>• 0 ... 20.000 ppm x m</li> </ul>	<ul style="list-style-type: none"> <li>• 0 ... 250 ppm x m</li> <li>• 0 ... 10.000 ppm x m</li> </ul>	
Accuracy	±5% of measuring end value		
Measuring distance	0.5 ... 8 m	Aperture 200 ... 700 mm (8 ... 28 in); probe length 1.1 m (3.3 ft)	Aperture 300 ... 500 mm (12 ... 20 in); probe length 1.1 m (3.3 ft)
Response time	5 ... 360 s		
<b>Measurement conditions</b>			
Measuring gas temperature	<ul style="list-style-type: none"> <li>• Up to 250 °C (480 °F), standard;</li> <li>• Max. 430 °C (800 °F) with extended calibration</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 220 °C (430 °F) <sup>2)</sup></li> <li>• Max. 260 °C (500 °F) <sup>3)</sup></li> </ul>	
Measuring gas pressure	Dependent on purge air blower (<30 hPa, <0.44 psi)		<120 hPa (<1.74 psi)
<b>Ambient conditions</b>			
Ambient temperature	-20 ... +55 °C (-4 ... +133 °F)		
<b>Approvals</b>			
Compliances	Type examination test		U.S. EPA, Type examination test
Protection class	IP 65		
Electrical safety	CE		
<b>Inputs, outputs, Interfaces</b>			
Analog inputs	1 analog input: 0 ... 20 mA, 100 Ω		
Digital inputs	1 status input: 5 V/2 mA max.		
Digital outputs	2 relay outputs: 125 V DC/1 A, 30 W; 150 V AC/1 A, 60 W		
Interfaces	RS232 service interface		
Bus protocol	PROFIBUS (option)		
<b>General</b>			
Control functions	Manual check function		
Mounting	2 mounting points on the duct (opposite side)	Single mounting point on the duct	Single mounting point on the duct

<sup>2)</sup> Permanent operation    <sup>3)</sup> Non-permanent operation