



Gas Analyzers Modular gas analyzer, S700

S700



Type > S700



The S700 modular system offers a configuration specific to the application. The S700 enclosures can be equipped with up to 3 analyzer modules for compact and cost-effective solutions. A total of 6 different analyzer modules are available for analyzing up to 60 gas components. Depending on the measuring task, installation site, and ambient conditions, the following enclosure types are available:

- S710 19" rack for analyzer cabinets and standard applications
- S715 wall-mounting enclosure for harsh conditions and hazardous area Zone 2 (ATEX)
- S720 flame-proof enclosure for hazardous area Zone 1 (ATEX)

At a glance

- 5 different measuring principles available
- Over 60 measuring components from which to choose
- 3 different enclosure versions for several application ranges
- Up to 3 analyzer modules in one enclosure

Your benefits

- Easy application-specific adaptation due to modular design
- Also suitable for hazardous areas Zone 1 and Zone 2 (ATEX)
- Automatic adjustment with test gas or calibration cuvette
- Integrated self diagnostics and watchdog functions

Fields of application

- Emission monitoring according to 2001/80/EC, 2000/76/EC and 27th FICA
- Cooling gas monitoring of turbo generators
- Measurement of CO for coal mill monitoring
- Purity measurement of H₂ in pressure swing adsorption plants
- Monitoring of CO₂ in natural gas in natural gas conditioning plants

Note

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

Technical data

Measurement principles:

Electrochemical cell, Interference filter correlation, NDIR spectroscopy, Paramagnetic dumbbell principle, Thermal conductivity measurement

Measured values:	(CH ₃) ₂ O, Ar, C ₂ Cl ₂ F ₄ , C ₂ Cl ₃ F ₃ , C ₂ Cl ₄ , C ₂ H ₂ , C ₂ H ₂ Cl ₂ , C ₂ H ₂ F ₄ , C ₂ H ₃ Cl ₃ , C ₂ H ₄ , C ₂ H ₄ Cl ₂ , C ₂ H ₅ OH, C ₂ H ₆ , C ₂ HCl ₃ , C ₃ H ₄ , C ₃ H ₆ , C ₃ H ₇ OH, C ₃ H ₈ , C ₃ H ₈ O ₂ , C ₄ H ₁₀ , C ₄ H ₆ , C ₄ H ₈ , C ₄ H ₈ O, C ₄ H ₉ OH, C ₅ H ₁₂ , C ₆ H ₁₀ O, C ₆ H ₁₂ , C ₆ H ₁₄ , C ₇ H ₁₆ , C ₇ H ₈ , C ₈ H ₁₀ , CBrF ₃ , CCl ₂ F ₂ , CCl ₃ F, CClF ₃ , CH ₂ Cl ₂ , CH ₂ O, CH ₃ Cl, CH ₃ OH, CH ₄ , CHCl ₃ , CHClF ₂ , CO, CO ₂ , CS ₂ , H ₂ , H ₂ O, He, N ₂ O, NH ₃ , NO, O ₂ , SF ₆ , SO ₂
Performance-tested measurands:	CO, NO, O ₂ , SO ₂
Max. number of measurands:	5
Measuring ranges:	CH ₄ : 0 ... 100 ppm/0 ... 100 Vol.-% CO : 0 ... 25 ppm/0 ... 100 Vol.-% CO ₂ : 0 ... 10 ppm/0 ... 100 Vol.-% H ₂ : 0 ... 1 Vol.-%/0 ... 100 Vol.-% N ₂ O : 0 ... 50 ppm/0 ... 100 Vol.-% NO : 0 ... 75 ppm/0 ... 100 Vol.-% O ₂ : 0 ... 1 Vol.-%/0 ... 100 Vol.-% SO ₂ : 0 ... 35 ppm/0 ... 100 Vol.-%
Comment:	Measuring ranges depend on application and combination of measuring components More than 60 measuring components available
Gas flow rate:	5 ... 100 l/h
Process pressure:	200 ... 300 hPa with tubed gas paths up to +1,000 hPa
Ambient temperature:	+5 ... +45 °C
Ambient humidity:	0 ... 75 % relative humidity; non-condensing
Conformities:	2000/76/EC 2001/80/EC 27. BImSchV ATEX EN 14181 GOST MCERTS German Clean Air Regulations
Ex-approvals ATEX:	S715: II 3 G EEx n R P II T6, II 3 G EEx R II T6 S720, S721: II 2 G EEx d ia IIC T6, II 2 G EEx d II C T6
Ex-approvals USA/Canada:	S715: Class I, Division 2, Groups A, B, C and D
Electrical safety:	CCSAus, CE
Enclosure rating:	S710, S711: IP 20 S715, S720, S721: IP 65
Analog outputs:	4 outputs: 0/2/4 ... 20 mA, 500 Ω voltage outputs (0...10 V) as option
Analog inputs:	2 inputs: 0 ... 20 mA, 100 Ω, 0 ... 2 V
Digital outputs:	16 outputs: 34 V AC, 0.5 A 48 V DC, 0.5 A 8 relay and 8 transistor outputs; 3 relay outputs preset for failure, service and maintenance
Digital inputs:	8 optical coupler inputs 24 V DC
Interfaces:	RS-232c (remote control) RS-232c (measured value/status signals)
Operation:	Menu-driven operation via LC-display and membrane keyboard
Device version:	19"-rack Version for Ex-zone 1 Version for Ex-zone 2 Flame-proof enclosure Field housing
Corrective functions:	Manual or automatic adjustment with test gases
Test functions:	Self test and fault diagnosis

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