

gas transmitter

OXYGEN / TOXIC / COMBUSTIBLE / VOCs




Applications:

- Refineries
- power plants
- manufacturing
- pharmaceutical
- sewage plants
- chemical plants
- fertilizers plants
- indoor air quality
- stack monitoring
- food & beverage
- sugar production
- gas cylinder bank
- ambient monitoring
- pulp & paper plants
- gas pipeline project
- gas metering station
- petrochemical plants
- heat treatment plants
- oil and gas industries
- automotive industries
- chemical storage area
- burner / furnace areas
- fertilizers & steel plants
- solvent recovery system
- bullet yard / storage yard
- industrial painting & coating
- coal mine and confined area
- waste water treatment plants
- acid alkalizes & dyes mfg. plants
- offshore drilling & plant shut-down . . .



Our current product overview. For further details please see our website www.arteos.com. We are constantly expanding our product offerings.

model	gas detected	key features
GA100	oxygen + toxic gases	→ measuring one gas per model
		→ output: 4 ... 20 mA with configurables ranges
		→ optional output: 2x relays with configurable alarm levels
GA200	combustibles gases	→ optional output: 1x RS 485 with MODBUS RTU protocol
		→ auto ranging of gas concentration
		→ remote control up to 10 m (optinoal)
GA300	volatile organic compounds VOCs	→ one man auto software gas calibration
		→ two line LCD-Display for concentration and gas type




Output:

- (1) 4...20 mA
- (2) 2x relays
- (3) RS485

Input: Oxygen + toxic Gases

Gas Transmitter GA100

The arteos GA100 is a gas detector that can measure toxic and oxygen gas applications on a single platform. GA100 is able to detect around 20 different toxic gases. The detection principle is electrochemical. We are expanding the number of gases to be measured continuously.




Output:

- (1) 4...20 mA
- (2) 2x relays
- (3) RS485

Input: Combustible Gases

Gas Transmitter GA200

arteos gas transmitter GA200 can measure over 40 different combustible gases. The detection principle is catalytic pelistor. We are expanding the number of gases to be measured continuously.



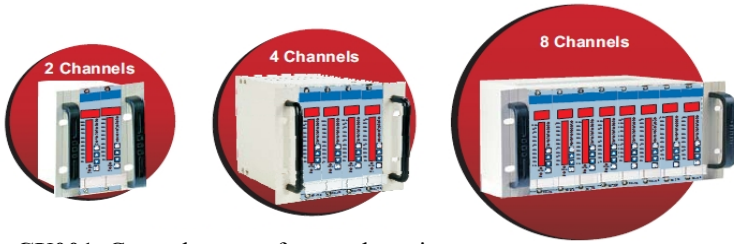
Output:

- (1) 4...20 mA
- (2) 2x relays
- (3) RS485

Input: VOCs

Gas Transmitter GA300

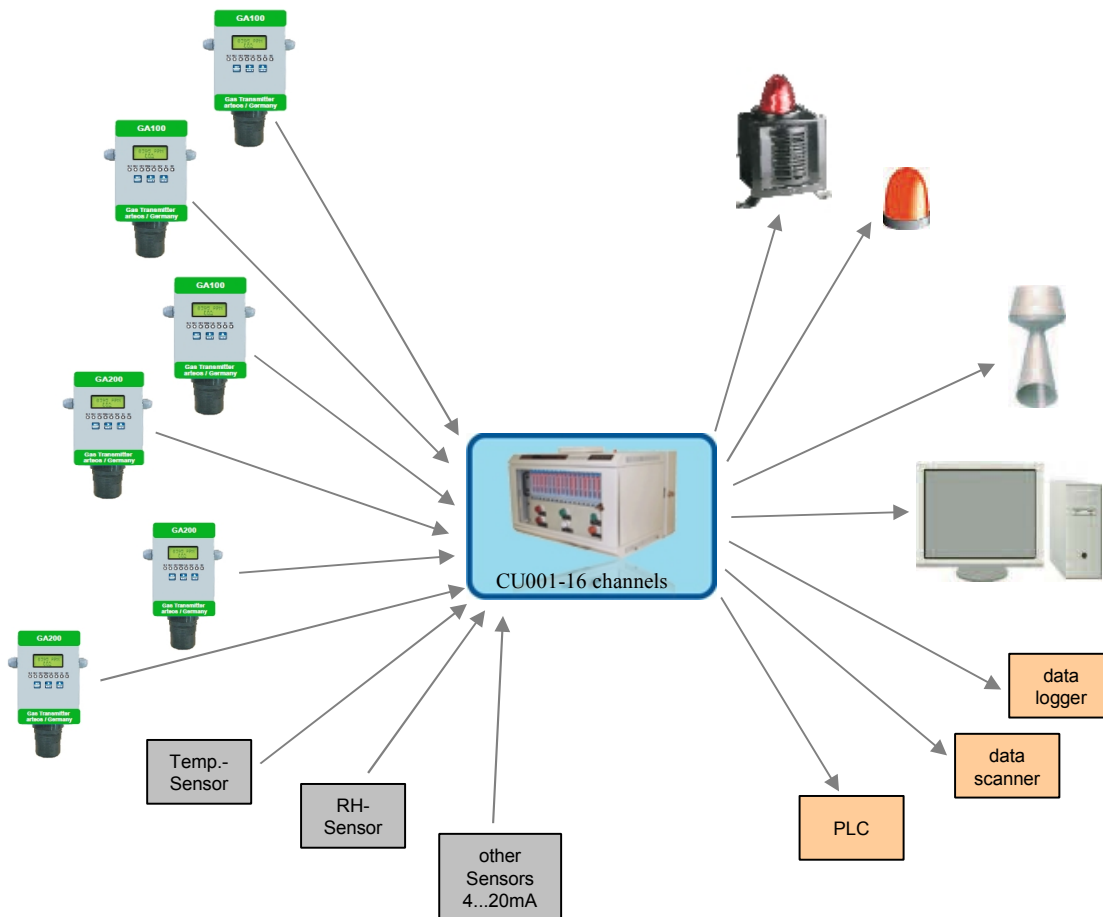
The arteos GA300 is a gas detector that can detect and measure over 300 different volatile organic compounds (VOCs). The detection principle photo ionization detection (PID). We are expanding the number of gases to be measured continuously.



The arteos control system CU001 is developed for continuous gas monitoring and alarm system. In combination with the gas transmitter series a customized control system can be configured for many applications.

CU001: Control system for gas detection

equipment input	connectable devices (output)	key features of CU001
GA100	alarm horn	→ alarm relay / open collector output for each sensor
	alarm lamp	→ output 4 ... 20 mA proportional to gas concentration
	PC (SCADA)	→ optional output: 3x relays with configurable alarm levels
GA200	data scanner	→ optional output: 1x RS 485 with MODBUS RTU protocol
	data logger	→ individual display and bar graph indication for each sensor
	ext. contact relays	→ more other accessories and devices can be connected
GA300	programmable logic controller PLC	→ easy automatic software calibration – no trim pots
		→ from one up to 16 channels



GA100 detected Oxygen + toxic Gases			
oxygen	Range	Unit	Resolution
Oxygen O ₂	0 ... 25	% Vol.	0,1
Oxygen O ₂	0 ... 100	% Vol.	0,1
toxic gases	Range	Unit	Resolution
Amonia NH ₃	0 ... 50	PPM	1
Amonia NH ₃	0 ... 100	PPM	1
Chlorine Cl ₂	0 ... 20	PPM	1
Chlorine Cl ₂	0 ... 200	PPM	1
Carbon Monoxide CO	0 ... 2.000	PPM	1
Carbon Dioxide CO ₂	0 ... 10	PPM	0,1
Ethylene Oxide C ₂ H ₄ O	0 ... 20	PPM	1
Hydrogen Sulphide H ₂ S	0 ... 100	PPM	1
Hydrogen Sulphide H ₂ S	0 ... 200	PPM	1
Hydrogen Cyanide HCN	0 ... 100	PPM	1
Hydrogen Chloride HCL	0 ... 50	PPM	1
Nitric Oxide NO	0 ... 250	PPM	1
Nitrogen Dioxide NO ₂	0 ... 20	PPM	1
Ozone O ₃	0 ... 2	PPM	1
Phosphine PH ₃	0 ... 9.999	PPM	1
Phosgene COCL ₂	0 ... 1.000	PPM	1
Sulphur Dioxide SO ₂	0 ... 50	PPM	1
Sulphur Dioxide SO ₂	0 ... 2.000	PPM	1

GA200 detected combustible Gases	
Range = 0 – 100 / Unit = % LEL / Resolution = 0,1	
Acetaldehyde CH ₃ CHO	Gasoline C ₈ H ₁₈
Acetone (CH ₃) ₂ CO	Heptane, n- C ₇ H ₁₆
Acetylene C ₂ H ₂	Hexane, n- C ₆ H ₁₄
Benzene C ₆ H ₆	Hydrogen H ₂
Butane, n- C ₄ H ₁₀	Isobutene C ₄ H ₈
Butanol, n- C ₄ H ₁₀ O	LNG
Butanol, i- C ₄ H ₁₀ O	LPG (Propan)
Butanol, t- C ₄ H ₁₀ O	Methane CH ₄
Butene, -1 C ₄ H ₈	Methanol CH ₃ OH
Cyclohexane C ₆ H ₁₂ O	Methylacetate C ₃ H ₆ O ₂
Cyclopropane C ₃ H ₈	Methyl Ether CH ₃ OCH ₃
Decane, n- C ₁₀ H ₂₂	Methyl Pentane C ₆ H ₁₄
Ethane C ₂ H ₆	Nonane, n- C ₉ H ₂₀
Ethanol C ₂ H ₆ OH	Octane, n- C ₈ H ₁₈
Ethene C ₂ H ₄	Pentane, i- C ₅ H ₁₂
Ethyl Acetate C ₄ H ₈ O ₂	Pentane, n- C ₅ H ₁₂
Ethyl Amine C ₂ H ₇ N	Pentene, 1- C ₅ H ₁₀
Ethyl Benzene C ₈ H ₁₀	Propanol, n- C ₃ H ₈ O
Ethyl Ether C ₂ H ₅ OC ₂ H ₅	Propane C ₃ H ₈
Ethyl Methylether C ₃ H ₈ O	Propene C ₃ H ₆
Ethylene C ₂ H ₄	

If you can't find a gas, please contact us (available on request).

GA300 detected VOCs
GA300 detected over 300 different VOCs. For details see the GA300 flyer on homepage www.arteos.com