

# Multifunctional gas analyzer of multi-component mixtures ГАММА-100А



Designed for detection of carbon monoxide CO, carbon dioxide CO<sub>2</sub> and methane CH<sub>4</sub> in multi-component mixtures.

## Application

Process and working area air monitoring at NPP.



Principle of measurement – optical absorption.  
Gas analyzer type - fixed.  
Sampling - forced (by means of flow rate pump or gauge pressure).

## Basic technical characteristics

Parameters	Values	Remarks
Temperature range of ambient and analyzable mediums, °C	+ 5 / +50	
Pressure range of analyzable gas medium, mm Hg	380 / 1400	
Flow rate of analyzable gas medium, l/min	0,7 ±0,2	
Protection degree	IP 54	
Readings setting time, s, at most	15	
Period of operation without readings adjustment, days, at most	30	
Standard analog signal, mA	4-20	
Standard digital output	RS232, RS485	
Supply voltage, V	220	
Overall dimensions, mm, at most (LxWxH)	485x480x180	weight 25 kg



## Gas analyzer naming

ГAMMA-100A-aa-bbb, where  
aa – chemical formula of the component (CO, CO<sub>2</sub>, CH<sub>4</sub>);  
bbb – upper limit of measuring range in accordance with the table.



## Climatic versions

> УХЛ4;  
> ТМ3 (optional).

Gas analyzer name	Analyte	Units of measurement	Measuring range	Part of measuring range where intrinsic error is rated	Limits of permissible intrinsic error for gas analyzer	
					Fiducial (Δ), %	Relative (Δ), %
ГAMMA-100A-CO-005	carbon monoxide CO	volume fraction, ppm	0-500	0-200	± 5	-
				200-500	-	± 5
ГAMMA-100A-CO-01	carbon monoxide CO	volume fraction, ppm	0-1000	0-500	± 5	-
				500-1000	-	± 5
ГAMMA-100A-CO2-01	carbon dioxide CO <sub>2</sub>	volume fraction, ppm	0-1000	0-500	± 10	-
				500-1000	-	± 10
ГAMMA-100A-CO2-5	carbon dioxide CO <sub>2</sub>	volume fraction, %	0-5,0	0-2,0	± 2	-
				2,0-5,0	-	± 2
ГAMMA-100A-CO2-10	carbon dioxide CO <sub>2</sub>	volume fraction, %	0-10,0	0-5,0	± 2	-
				5,0-10,0	-	± 2
ГAMMA-100A-CH4-01	methane CH <sub>4</sub>	volume fraction, ppm	0-1000	0-500	± 5	-
				500-1000	-	± 5



## Standard equipment

> Gas analyzer ГAMMA-100A;  
> SPTA set;  
> Documentation.



## Optional items can be ordered

> Flow rate pump П-2, ПР-7, ПР-9;  
> Control console ИБЯЛ.422411.005, communication cable SCF-13;  
> CD with software ИБЯЛ.431214.353.