

Portable gas analyzer for monitoring of hydrocarbons vapors АНКАТ-7631Микро-ФИД



Designed for mass concentration measurement of hazardous substances including vapors of oil and oil products in the air of working areas, and other components with ionization potential under 10,6 eV.

Application

Monitoring of flammable and explosive gases and vapors content in working areas, in open and closed spaces (underground constructions and utilities, reservoirs and tanks for storage and transportation of oil products, etc.).



Gas analyzer type - individual.
Principle of measurement - photo ionization.

Basic technical characteristics

Characteristics	Values	Remarks
Measuring range, mg/m ³	0-3 500	
Indicating range, mg/m ³	от 0 до 4 000	
Alarm types	light / sound	
Limit of permissible time of readings setting T _{0,95} , s, at most	60	
Explosion protection marking	«1ExibIICT4 X»	
Gas analyzer protection degree according to ГОСТ 14254-96	IP 68	
Range of operating temperatures, °C	-40 / +60	
Period of continuous gas analyzer operation, h, at least	18	
Vibration signal	АНКАТ-7631 Микро-ФИД (в) ИБЯЛ.413411.058-12	unavailable in modification АНКАТ-7631Микро-ФИД ИБЯЛ.413411.058-11
Overall dimensions, mm	55x35x105	weight 0,2 kg

Functions

- > Measurement of analyte mass concentration;
- > Digital indication of analyte mass concentration value;
- > Generation of sound and light warning and emergency alarms, generation of vibration signal (only for gas analyzers АНКАТ-7631Микро-ФИД (в)) if analyte mass concentration reaches threshold values;
- > Digital indication of the set threshold values;
- > Record of measured values of analyte mass concentration in non-volatile memory and data exchange with ED via USB interface;
- > Automatic PID shut-off in case value of analyte mass concentration exceeds the upper indicating level.

Advantages

- > Compliance with industry regulations of JSC "Transneft": "Air monitoring at facilities of oil and oil-products main pipelines";
- > High-strength enclosure (withstands drop onto concrete floor from a height of 1 m);
- > Has integrated vibrating alarm for working areas with high noise level;
- > Wide temperature range;
- > Monochrome display that operates at low temperatures;
- > Non-volatile memory with option of data transfer to PC;
- > Range of measurement with photo ionization method - from 0 to 3500 mg/m³; - quick detector replacement.

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Analytes and measuring ranges

Analyte	Measuring range, mg/m ³	Part of measuring range where limits of intrinsic error are rated	Limits of permissible intrinsic error (greater value is taken)	
			absolute, mg/m ³	relative, %
acetone	from 0 to 2 500	from 0 to 200 C _{in} 200 to 2 500	± 30 -	- ± 15
benzol	from 0 to 3 500	from 0 to 5 C _{in} 5 to 3 500	± 1,0 -	- ± 20
hexane	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15
isobutylene	from 0 to 3 500	from 0 to 100 C _{in} 100 to 3 500	± 15 -	- ± 15
isopentane	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15
n-pentane	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15
1,2- dimethylbenzene	from 0 to 3 500	from 0 to 50 C _{in} 50 to 3 500	± 7,5 -	- ± 15
toluene	from 0 to 2 500	from 0 to 50 C _{in} 50 to 2 500	± 7,5 -	- ± 15
trichloroethylene	from 0 to 3 500	from 0 to 10 C _{in} 10 to 3 500	± 25 -	- ± 25
phenol**	from 0 to 50	from 0 to 5 C _{in} 5 to 50	± 1,0 -	- ± 20
ethanol	from 0 to 2 500	from 0 to 1 000 C _{in} 1000 to 2 500	± 150 -	- ± 15
DF vapors	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15
petroleum	from 0 to 3 500	from 0 to 100 C _{in} 100 to 3 500	± 25 ± (25+0,15(C _{in} -100))	- -
kerosene	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15
solvent	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15
white spirit	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15
petroleum hydrocarbons (C ₄ -C ₁₀)	from 0 to 3 500	from 0 to 300 C _{in} 300 to 3 500	± 45 -	- ± 15

> *Range of mass concentration indication for all analytes is from 0 to 4000 mg/m³.

Least significant digit (LSD) of analyte indication, mass concentration, mg/m³:

- 0,1 in indicating range of 0 - 99,9;

- 1 in indicating range of 100 - 4000.

> ** not used for monitoring of MPC in the air of working areas, only for emergency situations.

C_{in} – analyte mass concentration at gas analyzer inlet, mg/m³.



Standard equipment

- > Gas analyzer АНКАТ-7631Микро ФИД;
- > SPTA set;
- > Documentation.



Optional items can be ordered

- > Sampling device ИБЯЛ.418311.038;
- > PID in package ИБЯЛ.305649.064;
- > Accumulator unit ИБЯЛ.563511.004;
- > Rubber bellow ИБЯЛ.302646.001 (for forced sampling);
- > Gas-sampling probe ИБЯЛ.418311.043;
- > Set for readings adjustment (TGM-SSS 2 pcs, fine adjustment valve, flow rate indicator);
- > Set for readings verification (TGM-SSS 3 pcs, fine adjustment valve, flow rate indicator).