

SCOPE OF APPLICATION:

- 1. Ambulance cars and any transport of emergency care.
- 2. Emergency care at home, outside, in field conditions.
- 3. Hospitals (operating rooms, resuscitation and intensive care departments, intrahospital and interfacility transportation).
- 4. Military and specialized medicine.

CHARACTERISTICS OF CO<sub>2</sub> MONITOR "MINICAP"

Weight of the processing and indication unit with a ventilation adapter	100±20
Overall dimensions of the processing and indication unit	(56×55×47)±5
Time of autonomous work from the battery	not less than 3 hours
Scale of capnogram graph	automatical
Range of respiratory rate determination, resp./min	from 4 to 150
Range of CO <sub>2</sub> concentration determination, mm Hg (volume %)	from 0 to 114, (from 0 to 15)
Tolerance of respiratory rate determination, resp./min, not more than	±1
Tolerance of CO <sub>2</sub> concentration determination, 0–40 mm Hg (0-5,3 %), not more than	±2 mm Hg (±0,3 %)
Tolerance of CO <sub>2</sub> concentration determination, 41–70 mm Hg (5,4-9,2 %), not more than	±5%
Tolerance of CO <sub>2</sub> concentration determination, 71–100 mm Hg (9,3-13,2 %), not more than	±8%
Tolerance of CO <sub>2</sub> concentration determination, 101-114 mm Hg (13,3-15,0 %), not more than	±10%
Tolerance of CO <sub>2</sub> concentration determination, when respiratory rate ≥80 resp./min, not more than	±12 %

Recommended to use together with  
CPR device "ARKA", Lung ventilator "RHYTHM 100 TMT"



Mini capnograph  
"MINICAP"



PORTABLE CO<sub>2</sub> MONITOR – CAPNOGRAPH

It is indispensable for paramedic teams, emergency medicine, law enforcement agencies and rescue units.



## PURPOSE:

- Continuous non-invasive monitoring of the carbon dioxide ( $\text{CO}_2$ ) concentration in the Main Stream by installing the Monitor with a ventilation adapter into the breathing circuit of patient.
- Measurement of the concentration of carbon dioxide in the respiratory gas mixture at the end of exhalation ( $\text{Et CO}_2$ ) and at the beginning of inhalation ( $\text{FiCO}_2$ ).
- The respiratory rate determination (RR).
- The graphical presentation (capnogram) and the measurement results display in real time.
- Generation of alarm and information signals based on physiological and technical parameters.

## THIS INVOLVES SOLVING THE FOLLOWING TASKS AND ACHIEVING THE FOLLOWING GOALS, WHICH ARE ESPECIALLY RELEVANT AT THE PRE-HOSPITAL STAGE:

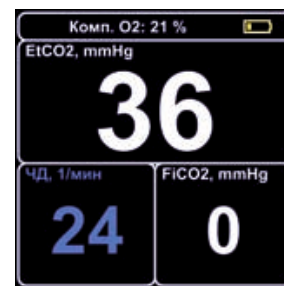
1. Control of trachea intubation effectiveness.
2. Control of spontaneous circulation return during CPR.
3. General control of ALV process.



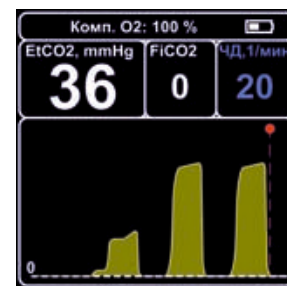
## EXAMPLES OF DISPLAY PARAMETERS:



Display 1  
"Full"



Display 2  
"Large figures"

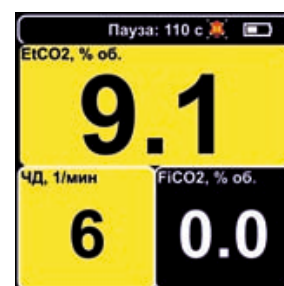


Display 3  
"Large capnogram"

## Views of diagnostic display



Technical alarm



Physiological alarm

## Alarm window

## MAIN DIFFERENCES FROM ANALOGUES:

- Measurement and monitoring of  $\text{FiCO}_2$  to control patient safety in case of large dead space or equipment malfunction
- Full-fledged possibilities of display and control like in a full-size monitor, allowing to set the screen to display large chars or large capnogram
- 3 types of display, 4 variants of display orientation with the 90 degrees rotation



The change of display orientation of diagnostic display

## ADVANTAGES AND FEATURES OF DEVICE:

- Supercompactness, installation into the contour.
- Full set of parameters on the screen (separate  $\text{EtCO}_2$  and  $\text{FiCO}_2$  indicators, respiratory rate, graphical capnogram with auto-scaling, set  $\text{FiO}_2$  compensation).
- Intuitive control, easy-to-read button designation and on-screen information.
- "FREEZE" mode ("Freezing", pause) – operation stop for tube sanitation or device setting up, this mode provides fast operation readiness after turning on and preparation



Examples of display types in the "Freeze" mode



- Colour display, visualization.
- A wide range of physiological and technical alarms with optimal default settings for monitoring the emergency events, with possibility of individual settings and turning off, all alarms are visual and audible.
- Fast comfortable navigation through the settings menu, with instant return to the main screen.
- There is no unpredictable self-calibration at the wrong time.
- Usage of disposable and reusable adapters.
- A well-thought-out storage system for the device itself and accessories based on the "two cases" principle.