

# HG-25

## Hydrogen Generator

Hydrogen generators of HG (hydrogen generator) and HG-HP (hydrogen generator of high purity) series are designed to supply flame chromatographic detectors with gas. Produced hydrogen corresponds to requirements of GOST 3022-80. Besides this HG-HP can be used as the source of gas due to extra gas purification, especially when helium is not available to user, for example during work with thermal conductivity detector (TCD). High thermal conductivity of hydrogen allows TCD to work with more sensitivity in comparison with helium.

Microprocessor controlling of operational modes makes hydrogen generator a standalone device, and also allows it to control general and technical parameters of generator including pressure, consumption, level of water poured into the tank, electrolyzer current, leakproofness of gas mains. All the mains of generator are made of inert materials.

### Both Types of Generators Provide

- Multistage system of gas purification
- Microprocessor controlling
- Reduction of heat release and increase of reliability by means of using power supply of electrolyzer with high efficiency
- Protection from hydrogen excess pressure and excess of electrolyzer current
- Automatic transfusion that ensures avoiding pressure failures
- Temperature control of oxygen afterburner
- Increase of electrolyzer service period by means of regulating hydrogen productivity
- Prevention of ingress of moisture into user's pipes by means of using hydrogen humidity indication.



Control and input of parameters is fulfilled through 4-button keyboard. Generators are filled by bidistilled or especially pure water with refilling during its work, without switching off the device, at that hydrogen generators ensure long continuous work.

B Hydrogen generators allow to reduce greatly or completely eliminate in the majority of cases the use of bottled gas for chromatograph provision.

There is no hydrogen reserve in generators that can possibly momentarily fill the laboratory or chromatograph, and its productivity will not allow to create an explosive concentration of gas in the room, and that increases its safety.

Electric power from single-phase network AC power with voltage from 187 to 242 V, frequency (50±1) Hz, work mode – continuous.

Bidistilled water is used for filling hydrogen generators, quality index of water must be no less than B grade of GOST 11.029.003 – 80 with electric resistivity no less than 1 Ohm m/cm.

