

## ORDER DESCRIPTION

### Universal system for testing planar fuel cells with the following parameters:

- the ability to measure solid oxide fuel cells of various sizes, including round and square/rectangular shapes:
  - button cells with a diameter of 10 mm to 50 mm (or more) and a thickness of 0.5 - 2 mm;
  - square/rectangular-shape fuel cells up to 5x5 cm<sup>2</sup> (or larger) and 0.5 – 2 mm thick;
- equipped with electrical connections made of gold wires, reinforced with a reusable gold contact mesh on the oxygen side and nickel mesh on the hydrogen side;
- the possibility of internal fuel reforming with the use of catalysts in the system supplying gases to the cell;
- the ability to adjust the clamping force of the cells in the range from 0 to 100 kg;
- the ability to work with sealed cells and collect exhaust gases for analysis;
- has a gas distribution system on the oxygen side made of ceramic elements;
- enables operation up to a high rate of fuel utilization (>80%);
- possibility of quick assembly and disassembly of cells without damaging them;
- equipped with a supply system enabling steam generation for water electrolysis;
- a system complete with a heating furnace with a maximum operating temperature above 1300°C, a controller and thermocouples;
- possible to carry out measurements in the range of 500 °C - 900 °C.

The devices covered by the subject of the order must have a quality guarantee of at least 24 months from the date of signing the delivery and acceptance report.

The maximum delivery period counted from the date of signing the contract is 10 weeks.