



MTSA-450 Manual Test Stations made by ElectroChem, Inc.



Description:

MTSA-450-N and MTSA-450-NL

A system built upon the successful and versatile architecture of ElectroChem's standard MTSA 450 adding new available options:

- computer control option with Notebook PC
- programmable mass flow controller / temperature controller
- customize data collection and acquisition with LabVIEW™
- custom graphics
- versatile electronic load (0,1 - 400 W)
- constant current and constant voltage mode
- 2 precision calibrated mass flow controllers
- dual load channels (3 V / 100 A and 20 V / 20 A) cover the load profile over micro fuel cells, single cells, and fuel cell stacks
- key pad programmed for a wide range of gases
- digital flow rate display (scm)
- 1000 scm capacity
- 2 back pressure regulators
- analog pressure display (psi)
- 1 temperature controller
- precision PID algorithm
- 400 W AC output

MTSA-450-N

with gas management, humidification system and electronic load

MTSA-450 is a cost effective fuel cell test station which puts together a gas management unit, a humidification system and an electronic load that provides a complete control features for conducting reliable fuel cell testing. All gas channels have stainless steel construction. The gas management unit consists of 2 gas flow meters, 2 back pressure regulators and 2 pressure gauges. The humidification system includes two 1,5 liter stainless steel water vessels and provides 100 % humidification with gas flow rates up to 3 SLPM. The temperature of the fuel cell and two gas humidifiers is controlled by three temperature controllers. A solid state electronic load is capable of providing up to 400 W (20 V and 20 A max. or 3 V and 100 A) and can be selected to operate at both constant current and constant voltage modes.

Item	Price in Euro
MTSA-450-N	27.340,-

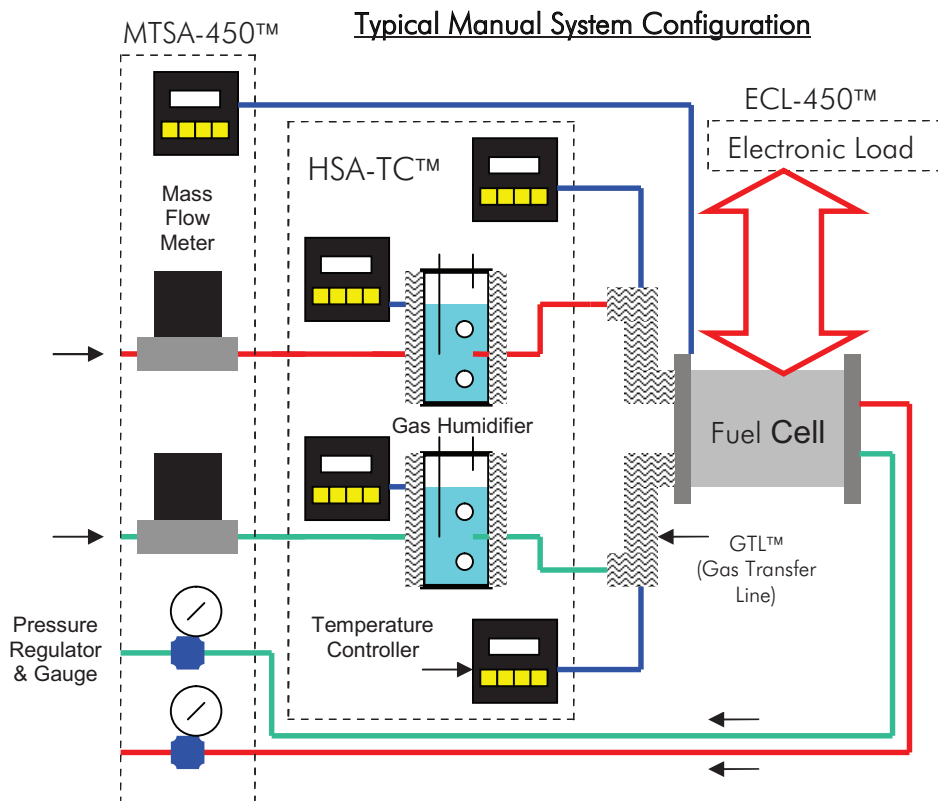
MTSA-450-NL

with gas management, humidification system, electronic load and laptop an LabVIEW™ software

The MTSA-450-L has all the advantage control feature of the MTSA-450 which puts together a gas management unit, a humidification system and an electronic load that provides a complete control features for conducting reliable fuel cell testing. In addition it comes with a laptop an Labview software compatibility. Electrochem has integrated the LabVIEW™ software to facilitate fuel cell testing. Researchers have the freedom to customize the software to their individual needs.

Item	Price in Euro
MTSA-450-NL	37.100,-





ElectroChem's **MTS-450-HSA** includes a basic MTS 450 unit and our HSA humidification. The system includes two temperature controllers, one for each of the two gas channels plus two optional controllers for regulating the optional heated gas transfer lines.

MTS 450-DM adds direct methanol capabilities to the MTS test station. The MTS-450-DM includes the methanol pump with flow rates from 2.6 up to 100mL/min (higher rates available on request).

ElectroChem's **MTS 450-HGL** contains two heated gas lines, which provide a non-condensing condition between the humidifier and the cell being tested.

Typical MTS-450™ Configuration with HSA-TC™ and ECL-450™

