



FCTS-10kW

Fuel Cell Test Station 10 kW

**WIDE RANGE OF FULLY CUSTOMIZABLE
PROFESSIONAL TESTING SOLUTIONS
100W – 100KW**

**Send us your requirements and we will
prepare a detailed offer for your turn-
key project.**

Gas supply specification

MFC Gas flow - anode	0-500 slpm
MFC Gas flow - cathode	0-1000 slpm
MFC additional gas (CO, ...)	optional
N2 purge	✓

Pressure control and measurement

Backpressure gas controller - anode and cathode	✓
Cell inlet pressure sensor range - anode and cathode	✓
Gas inlets pressure sensors	✓

Humidification

Humidifier – micro bubbler	✓
Dew point	From room temp. to 95°C
Anode/Cathode Dry gas bypass function	✓
Automatic water reservoir refilling	✓
Low water level warning	✓
Programmable over temperature shutdown	✓
Automatic dry by-pass	✓

FC stack connectivity

Thermally isolated inlet hoses	✓
Internal tubing heaters	✓
Thermocouples	✓
Cell heater	Integrated PID control
Cell voltage monitor	Customized number of inputs



Electric load 10kW

Programmable electronic load	✓
Standard working modes	Const. Voltage, Const. Current
Current ranges	customized
Voltage range	customized
Useable maximum power	11kW
Regenerative load	optional

Impedance spectroscopy

Integrated EIS	optional
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Automation and control system

Desktop master PC	OS Windows 10
Internal slave industrial computer	PLC controlled by PC using web interface
Remote control	✓
Software with graphic interface	✓
Data storage	✓

Dead end operation, optional

Hydrogen pressure regulator	✓ manual
Hydrogen humidification	No
Air humidification	✓ with dry bypass
Hydrogen purge valve with water separator	✓ programmable dwell time
Connectivity to an external hydrogen return pump	✓
Hydrogen/oxygen backpressure regulator	No

FC stack cooling

Cooling/heating by using demineralized water	✓
Cooling with water-tap water heat exchanger	✓
Programmable temperature	✓
Cooling chiller	optional
Pre-heating by integrated tubular heater	✓
Conductivity/temperature sensor	✓
Pressurized water tank	✓
Stainless steel water pump	✓
Overheating security stop	✓

Security

Security shut down with hydrogen/nitrogen purging	✓
Emergency Manual shut down switch (E-stop)	✓
Remote Emergency shut down (HW interlock)	✓
Closed exhaust system with water separator	✓

Dimensions and weight

Size	1600x1200x1800mm
Weight	600kg