

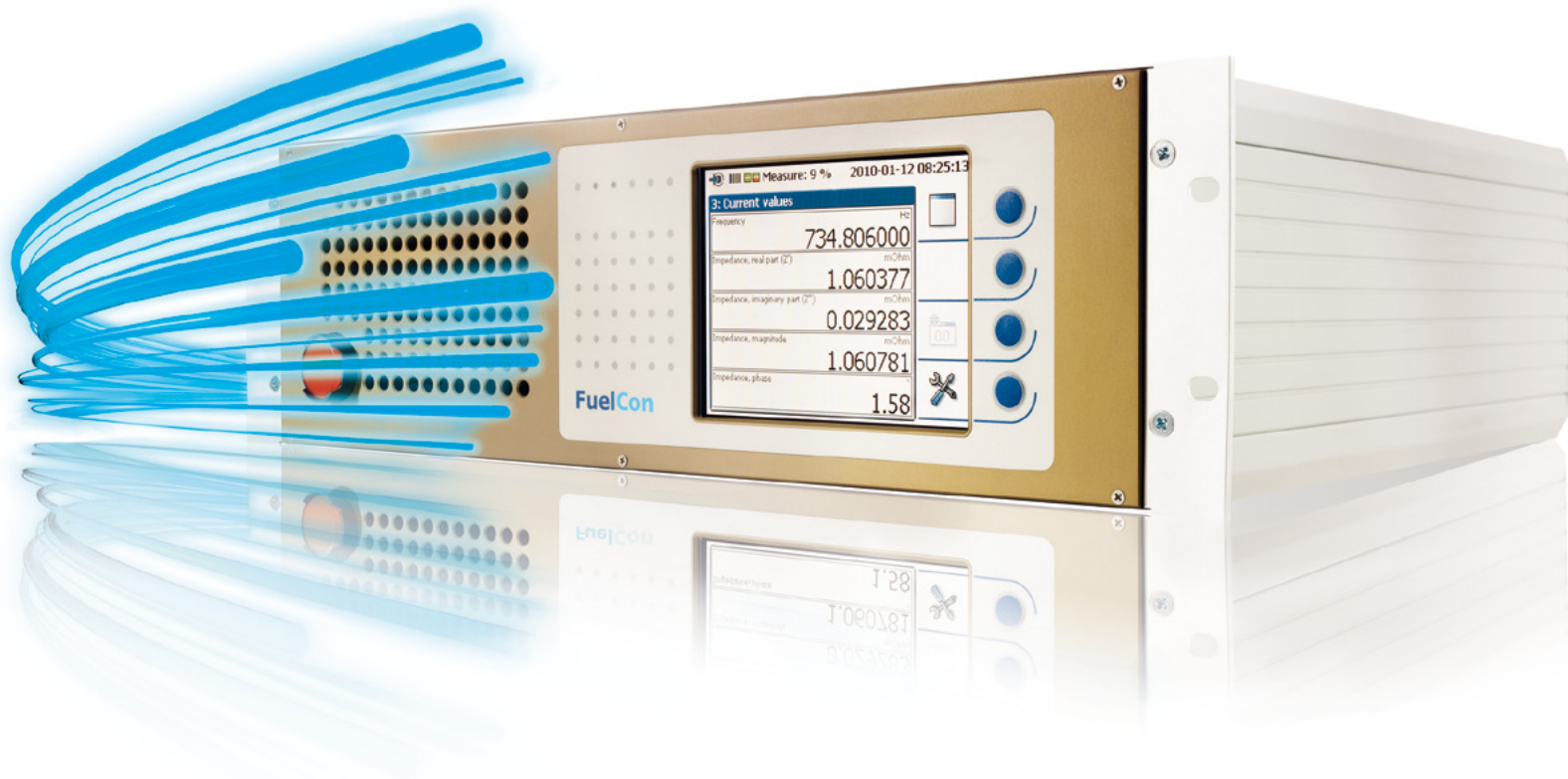
FuelCon

Tomorrow's energy. We make it work.

TrueData-EIS

Impedance Spectrum Analyzer

- For fuel cell and battery research and diagnostics
- Performs automated testing under unattended operation
- Supports charge neutral measuring (CN-measuring)
- Automatic drift compensation
- Rapid measurement of impedance spectrums between 200 μ Hz and 100 kHz
- Compatible with external loads, potentiostats and galvanostats up to 1,000 A DC
- Multiplexer TrueData-MUX with 12, 24 or 36 channels



The [FuelCon TrueData](#) product line consists of various analytical tools and accessories to assist investigators in the field of fuel cell, battery, super capacitor or general electrochemistry research. The [TrueData-EIS](#) impedance analyzer is a high-capacity, noninvasive diagnostic tool designed by FuelCon for measuring the electrochemical impedance spectrum of components during operation under different load conditions.

It bases on the single-sine-method and explores impedance spectrums in a frequency and power range, which is especially interesting for the fuel cell and battery development: from 200 μ Hz up to 100 kHz with a maximum DC current of 1,000 A. Typically, the EIS is applied together with electronic load modules of [TrueData-LOAD](#).

In addition, the [TrueData-EIS](#) is compatible with a various number of external loads, potentiostats and galvanostats.

Its optimum performance the [TrueData-EIS](#) reaches in combination with the FuelCon [Evaluator](#) test station and the operator software [TestWork](#). The optional multiplexmodule enables the easy and cost-optimized realization of multi-channel measuring arrangements.

Please feel free to download the latest information available at our website www.fuelcon.com. If you have any questions, please do not hesitate to contact us. We will be happy to support you and discuss your testing requirements!

Parameter	TrueData-EIS	TrueData-EIS CN
Impedance range	5 $\mu\Omega$ to 15 Ω	5 $\mu\Omega$ to 15 Ω
Impedance accuracy	Up to 0.1 m Ω ¹	Up to 0.1 m Ω ¹
CN-Measuring (charge neutral)	No	Yes
Frequency range	200 μ Hz up to 100 kHz	200 μ Hz up to 100 kHz
AC modulation current	2.5 A, 5.0 A, 7.5 A, 10 A	2.5 A, 5.0 A, 7.5 A, 10 A
DC voltage maximum	10 V, 35 V, 70 V, 100 V	10 V, 35 V, 70 V, 100 V
DC current maximum	100 A, 250 A, 500 A, 1,000 A	100 A, 250 A, 500 A, 1,000 A
L-Measuring (load measuring)	Yes	Yes
DC drift compensation	Yes	Yes
Memory card	Yes	Yes
RS232-Interface and Ethernet	Yes	Yes
Webserver	Yes	Yes
Power supply	100 to 230 V _{AC}	100 to 230 V _{AC}
Housing	19" housing	19" housing

FuelCon reserves the right to make changes any time without notice.

¹ Depending on modulation current and DC voltage