



news & updates March 2026 | Issue 13

In this issue:



CEO's Corner

Dear Colleague,

At Saelig we are always on the lookout for unique, world-class test products — and we have found some in a German company named Sciospec which specializes in solutions for electrical impedance spectroscopy, impedance tomography, and other electrochemical/electroanalytical techniques. Primary applications for these products are bio-analytics, biosensors, material science, and process control.

From small scale biochip solutions over multichannel biochip-readers up to massive-multichannel solutions for fully automated industrial process control or high content screening for pharmacological testing — scalability is in Sciospec's DNA. Sciospec technology in the form of OEM modules is at the heart of countless products for bioanalytical and medical applications. Major universities and research institutions around the world use Sciospec instruments. Their highly customizable solutions enable turn-key research, powering the next generation semiconductor manufacturing, and enabling new levels in scalability for automated component test applications.

Technologies addressed include: electroanalytical measurements, electrical impedance spectroscopy, 2D and 3D impedance tomography, electrophysiological measurements, electrochemical techniques in typical application areas such as bioanalytics & biosensors, medical component testing and material and process analytics.

A brief description of their product line follows.ink about inserting phrases like "for a limited time only" or "only 7 remaining!"

What's New?

Click here for [Update](#)

Contact Information

Voice: 585-385-1750

FAX: 585-385-1768

Sales: sales@saelig.com

Tech Support: support@saelig.com

Quotes: quotes@saelig.com

Promotions

Click here for [Promotional Items](#)



- IF Frontend: 100 mHz... 10 MHz, mOhm... TOhm
- Frequency extendable to 40 MHz or even 100 MHz
- 2, 3 and 4 electrode configurations
- High resolution (up to 2048 frequencies per sweep)
- Base precision of 0.01%
- +/- 1 V DC Bias

ISX-3 EIT
Electrical Impedance Spectroscopy & Tomography system



The best in unique electronics since 1988

- Adapters
- Amplifiers
- Automotive
- Diagnosis
- Cables
- Components
- Converters
- Data Loggers
- DC Loads
- Embedded
- EMC Equipment
- Interconversion
- Integrated Circuits
- Logic Analyzers
- Motion Control
- Motor Control
- Multimeters
- Oscilloscopes
- Panel Meters
- PCB Test
- Power Analyzers
- Power Supplies
- RF/Microwave
- Sensors
- Signal Generators
- Spectrum Analyzers
- Switches
- Test Enclosures
- USB Analyzers
- Waveform Generators

Test Equipment 	Automotive 	Cables / Converters
EMC Test 	Components 	RF Shielding
Data Loggers 	Displays 	Embedded
Industrial PCs 	PCB Test 	Ultrasonic



Saelig Website



Founded Saelig in 1988 to search the world for unique electronic control and instrumentation equipment including environmental enclosures, PC and RF spectrum analyzers, USB and logic analyzers, AMCA, pure RF sources, DMMs, data loggers, DR and DC controllers, PCB test, high-see industrial panel PCs, EM enclosures, USB serial converter cables, etc. Our satisfied customers include Intel, Apple, Philips, Matsushita, NEC, TI, Hitachi, Sony, HP, General Dynamics, Raytheon, Chubb, many other Fortune 500 companies, military, educational institutions, hospitals, individual end-users, students, hobbyists, etc.



Visit the Saelig



Channel

Search for **Saelig Company**



- Product Reviews
- Technical Analysis
- Manufacturer Information
- Product Announcements



Saelig **Offers**
Free Shipping!*



* Free ground shipping with most orders of \$99 or more!

(U.S. domestic orders only, AK, HI, and some products excluded)



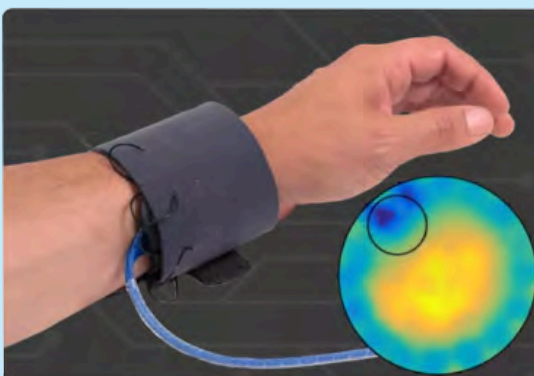
Sciospec Electrical Impedance. At its best.

World-leading solutions for research and Industrial use

ISX-3 is a class-leading, compact, single-channel, high resolution impedance analyzer which has proven its worth in everyday use in countless applications in leading research institutes across Europe and around the world, paving the way for new applications of impedance spectroscopy thanks to its outstanding performance and unbeatable price point. PC-controlled, it offers a frequency range of 10mHz to 10MHz (optional 40 or 100MHz) and an impedance measurement range from m Ω to G Ω , with voltage and current excitation. Its extension port can connect with a variety of Sciospec extension modules.

If plans expand to greater needs than a single impedance analyzer can handle, up to 8 impedance measurement channels can be integrated into one **ISX-5** and provide true fully-parallel, ultra-fast measurements thanks to some powerful signal processing. Multiple ISX-5 chassis can be joined together to enable even higher channel counts.

A **Medical Research ISX-3** is also available for research, with a medical grade enclosure modification, isolated medical grade power supply, network isolator, isolated Ioport, etc. Based on the ISX-3 impedance analyzer, it is equipped with Sciospec's IF frontend with 4-port BNC interface supporting simple two-point measurements, as well as 3 and 4 electrode configurations. Within the measurement range from 100 mHz to 10 MHz (extendable to 40 or 100 MHz) it covers a dynamic range of 300dB (mOhm to TOhm) with a base precision of 0.01%. Additionally, the **Medical Research ISX-3** includes measures for enhanced electrical safety including medical grade isolation enabling a safe operation of the instrument in medical research settings.



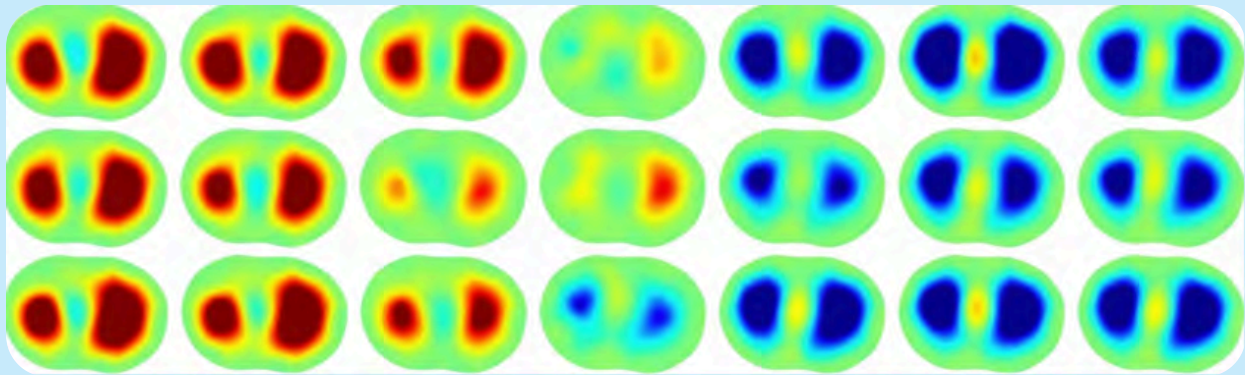
Safety & Compliance

enabling medical research for a better tomorrow

- medical safety for impedance measurements
- extensive application experience
- large selection of options for medical

Electrical Impedance Tomography (EIT) is an imaging technique that visualizes conductivity or impedance distributions both in 2D and in 3D. Sciospec is partnering with world leading scientists in the

field to deliver solutions that enable EIT both in research and in practical applications. With its outstanding performance, the [EIT16](#) and Sciospecs higher channel count EIT systems [EIT32/64/128+](#) have become the most popular EIT systems for research and industry. While many researchers use the systems for lung monitoring, their performance and the countless customization opportunities available, mean they are also put to use in leading research institutes paving the way for new applications of impedance tomography.



The system is designed for measurements for electrical impedance tomography or general multi-port impedance measurement applications. True parallel measurements and tightly synchronized switching allows for fast frame rates.

[ISX-3 EIT](#) brings together two worlds: On the one hand it is a high-performance impedance analyzer with the measurement speed, precision and broad frequency range users expect from Sciospecs systems. On the other hand the [ISX-3 EIT](#) offers exceptional EIT functionality. This is realized through a measurement mode of its integrated 32-channel any-to-any multiplexer.

Apart from *standard instruments* for easy entry into the world of EIT Sciospec also offers *customized EIT* products as well as *application-specific OEM* solutions. Built on a flexible technology platform, scalability is at the heart of all Sciospec's instruments. Channel counts of up to 256 are available in standard configurations and some reference system designs contain even more. Applications range from the classical medical situations (lung ventilation monitoring and electrode positioning problems) to industrial applications (pipe system monitoring and contamination tracking) to state-of-the-art chip-based EIT for biosensing applications. For easy entry, Sciospec software provides EIT image reconstruction functionalities for time- and frequency-difference imaging. Alternatively, MATLAB code can be used to import data to EIDORS or image reconstruction code can be customized to import it to Sciospec's software.

Who we are working with and for



LCR Meter

Electrical component analysis has never been this easy. Based on the same technology as Sciospec's industry leading impedance analyzers, the LCR-1 combines next-level performance with the simplicity of an LCR meter. In terms of range, accuracy and speed, the LCR-1 competes with other, more expensive high-end instruments while maintaining a compact form-factor, simple setup, and ease of use, previously unseen in this instrument class. Unlock the power of component analysis with the LCR-1!

From the outside the LCR-1 appears to be utter simplicity, but on the inside, however, is the same cutting-edge measurement technology as Sciospec's high-end impedance analyzers. This results in extremely wide

measurement ranges, speed, and accuracy that is not typically found in systems of this price and ease of use. This makes the LCR-1 the ideal choice for: simple day to day tests in the workshop, quality testing in component manufacturing, prechecking before Pick-and-Place assembly, material and component research, etc. Ranging from 1 mΩ... 1 TΩ, 10 fF... 1 kF, 1 nH ... 1 TH, the LCR-1 is specified for 0.01% base accuracy and an impedance range only challenged by top of the line impedance analyzers. The large selection of compatible test adapters enables all commonly seen component and material test scenarios and the modern, easy-to-use software user interface makes testing a breeze.



Electrochemistry

Potentiostats/Galvanostats — from small form-factor handheld solutions up to massive multichannel systems for automated test.

Customizable

Sciospec's modular platform allows for cost-efficient customization while keeping the development risk low. Need an application-specific multiplexing solution, a ready-to-go portable device for mobile health or a massive multichannel platform for a screening application? Just get in touch with us!

Endorsements:

"Thanks to the high speed of the ISX-3 mini, we are able to sample 200 spectrums per second. This enables a whole range of new measurements on muscle tissue."

FRED-JOHAN PETERSEN Oslo University Hospital

"We are using the ISX-3 impedance analyzer to characterize the impedance of 3D printed models that replicate the electrical characteristics of the cochlea in the inner ear. This enables us to make accurate and flexible platform to be able to test cochlear implant stimulation to optimize the restoration of hearing for severe to profound patients. Furthermore, we will use the device on cadaveric specimens to get unprecedented characterization of the electrical characteristics on real human samples which will feed directly into computational models and clinical applications of these devices."

IWAN ROBERTS University of Cambridge

Check Out Our Website for Other Fine  Product Offerings

For Sales and Promotions, Click [Here](#).

Test Equipment



Automotive Test



EMC/EMI



Cables



Components



Converters



Data Loggers



Displays



Embedded



RF Shielding



RF/Wireless



Ultrasonics



Saelig
Unique Electronics
www.saelig.com 1-585-385-1750

The best in world-wide unique electronics

