



ELT3000 PLUS

Battery

Leak Detector

Flexible plug-and-play for reliable
leak testing of battery cells



 **INFICON**

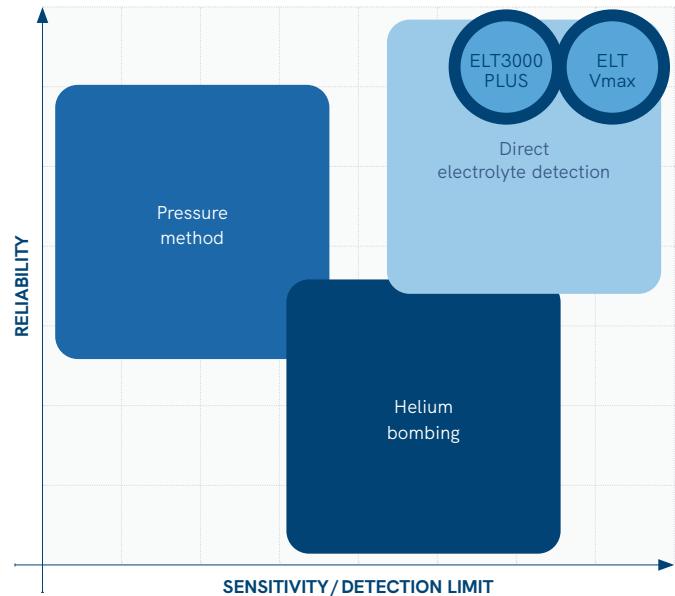


The future is electric

The dynamic battery cell development industry demands that users continuously promote innovation to be able to successfully meet the ever-changing requirements. The ELT 3000 PLUS Battery Leak Detector offers the advantage of a system that gives you the flexibility essential to modern battery technologies. Rely on unrivaled, safe battery leak testing, and always be a step ahead of the competition.

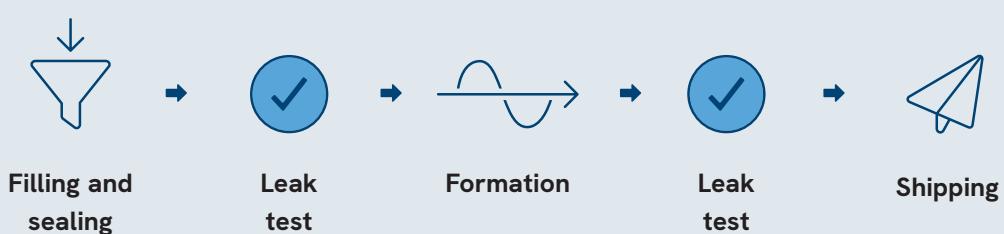
Accurate down to the micrometer, highly sensitive and significantly faster

INFICON offers a unique, patented leak testing method for all types of metal-ion batteries like e.g. lithium-ion batteries with the new ELT3000 PLUS. ELT3000 PLUS can detect electrolyte leaks down to the micrometer level, 1,000 times smaller than those detected by conventional pressure methods. Rely on ELT3000 PLUS to test all types of metal-ion batteries, like lithium-ion, sodium-ion or aluminum-ion batteries, including those used in automotive, communications technology, computers, consumer goods, electric tools, and medical devices. Regardless of how different the fields of application may be, any metal-ion battery can be checked using electrolyte leak testing.



End-of-line-test for high quality products

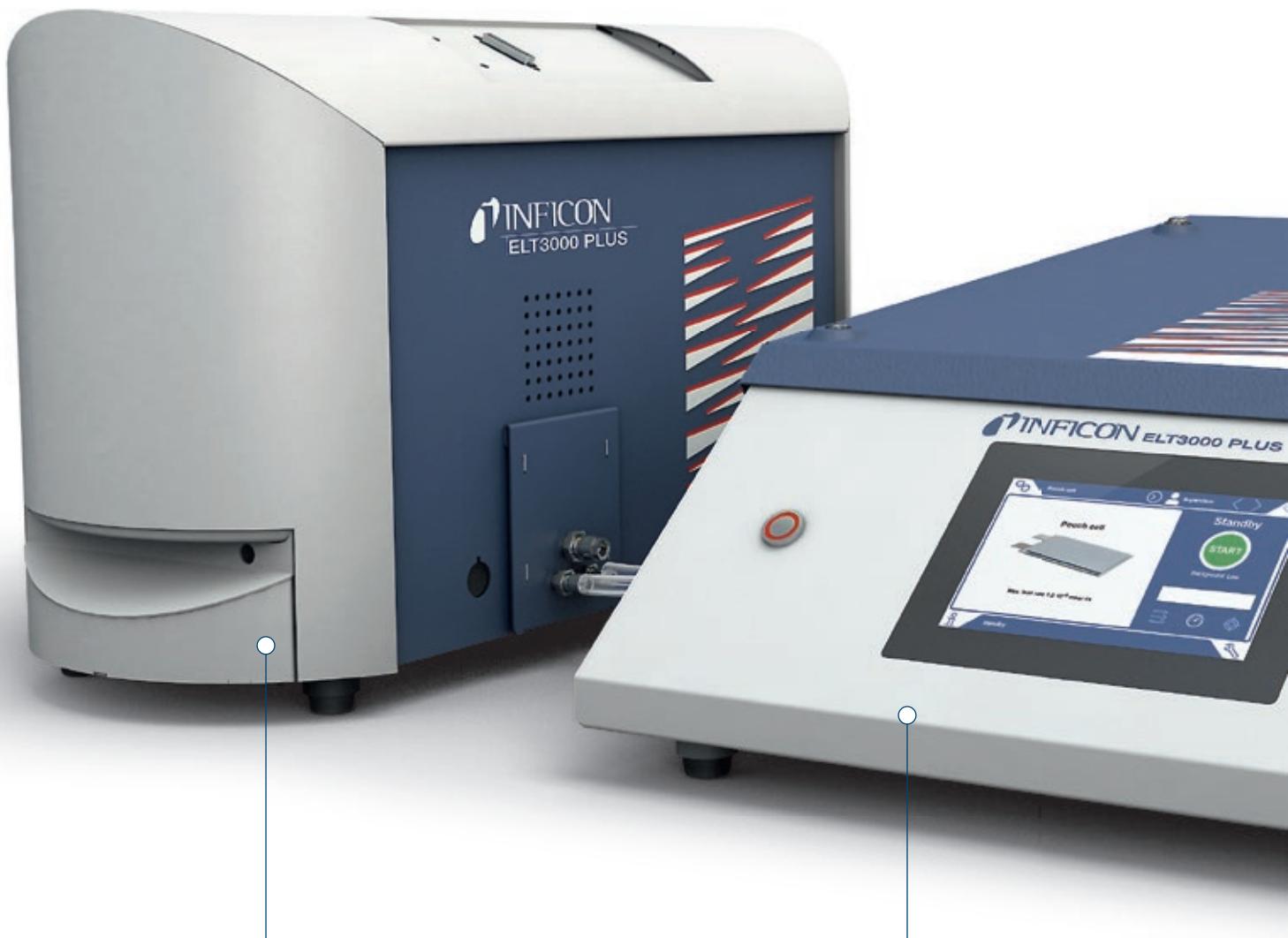
INFICON's direct leak detection can be used throughout the battery production process. Right after filling the various metal-ion cells, thus preventing the costs and risks due to leaks resulting from formation of faulty cells. For true, end of line leak testing, check after forming and aging of the cells.



Quality assurance 4.0 for industrial battery cell manufacturing

Benefit from fast measurement times as well as repeatability at an extremely high throughput rate during quality assurance of your battery cells.

Serial and fieldbus interfaces allow ELT3000 PLUS to be integrated into higher-level host systems for leak testing. Ideal conditions for reliably compiling data, parameters and operating states of ELT3000 PLUS and adapting them as needed.



GAS DETECTION SYSTEM

Detects electrolyte leaks in all lithium-ion batteries and transfers test data to the control unit.

CONTROL UNIT

Coordinates the test cycle and displays the process on the touch screen. Data can be retrieved in real-time via bus interfaces.

BENEFITS

✓ For immediate use

Plug-and-play solution for quick installation as well as safe, duplicable tests.

✓ Extremely versatile

A wide range of interfaces allows ELT3000 PLUS to be easily implemented into production lines.

✓ Always ready for operation

Integrated detection of gross leaks protects the device from severe contamination and maintains operational readiness.

✓ Universally capable

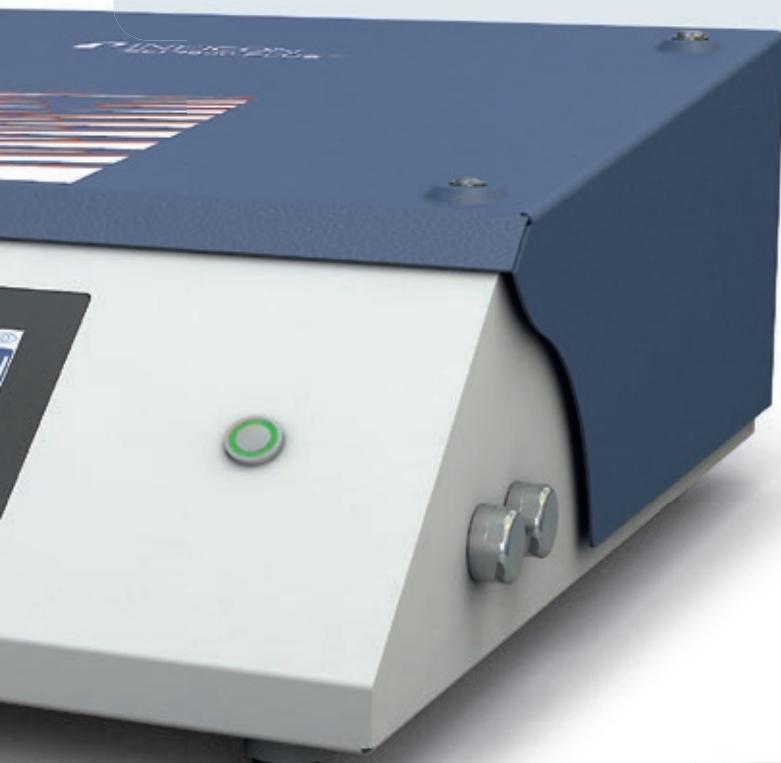
ELT3000 PLUS tests all cell formats of battery cells filled with liquid electrolyte, e.g. lithium-ion, sodium-ion and many other batteries.

✓ Maximum flexibility

Optimal solution for R&D, with the option of both rigid and flexible chambers to test all battery cell formats filled with electrolyte.

✓ Dual operating modes

Stand-alone mode for manual operation during battery development and pilot projects, or inline mode for automated processes.



E-CHECK FOR CALIBRATION

Certified calibration leaks enable traceable results.



At the forefront of innovation?

Providing support throughout your entire testing process.

To maximize the potential of your application, take advantage of our professional consulting services for everything related to ELT3000 PLUS. We will work with you to design the best way to integrate ELT3000 PLUS into your battery production process. Our experts can provide training for how to use batch testing processes or how to adapt the chambers precisely to your requirements. This allows system integrators to be very flexible when it comes to strategies regarding removal and placement of batteries.

INFICON Academy gives you the edge on knowledge

Would you like to learn more about how to use ELT3000 PLUS in serial production processes? INFICON offers webinars, individual workshops, and in-house seminars. INFICON Academy lets you share ideas with our experts and benefit from their expertise. Services range from how-to videos, training to meet your specific leak detection requirements and more. INFICON Academy also includes useful examples and tips from practical applications.

Our service and support

From expert support for integration and operation to preventative maintenance and spare parts with worldwide availability, we ensure that you can use your ELT3000 PLUS to its full potential. An INFICON service contract maximizes the life and performance of your testing device. Save time and money by protecting your investment today. Contact us to learn more.



ELT3000 PLUS – Our contribution to sustainability

In the future, the global battery market will be driven substantially by the availability of raw materials and the need for sustainability. With its reliable battery leak detection, INFICON ensures safe, long-lasting battery cells that are resistant to cycling and an efficient use of resources.



ELT3000 PLUS BATTERY TESTING SYSTEMS

TECHNICAL DATA	
Smallest detectable leak rate	5x10 ⁻⁷ mbar l/s (helium-equivalent leak rate)
Leak rate unit	mbar l/s, atm cc/s, Pa m ³ /s
Detection sensor	Quadrupol mass spectrometer (2 cathodes)
Interfaces	PROFIBUS, PROFINET, DeviceNet, EtherNet/IP, serial interfaces (RS232), digital I/Os
Dimensions gas detection unit (W x H x D)	610 x 300 x 380 mm (24 x 12 x 15")
Dimensions control unit (W x H x D)	700 x 540 x 250 mm (27.6 x 21.3 x 9.8")
Operating languages	German, English, Spanish, Korean, Chinese, Japanese

ORDERING INFORMATION	
PRODUCT	CATALOG NUMBER
Basic leak detector	
ELT3000 PLUS (gas detection unit + control unit) 230V, 50Hz	600-201
ELT3000 PLUS (gas detection unit + control unit) 115V, 60Hz	600-202
Test chambers for stand-alone mode	
TC3000S rigid chamber (180 x 180 x 27 mm)	600-100
TC3000L rigid chamber (400 x 210 x 120 mm)	600-101
FTC3000 flexible chamber (400 x 350 mm)	600-102
Calibration leak E-Check	600-105
ACCESSORIES	
Module I/O1000	560-310
Data cable I/O1000	
2 m	560-332
5 m	560-335
10 m	560-340
Bus module BM1000	
PROFIBUS	560-315
PROFINET	560-316
DeviceNet	560-317
EtherNet/IP	560-318



Innovation based on proven, patented technology

At INFICON, we know that leadership in technology can't happen without being a leader in innovation. This is why we develop and realize pioneering solutions that enable our customers to conquer even the future challenges facing their industry.

INFICON *Inspired by visions. Proven by success.*

www.inficon.com

reachus@inficon.com