

ELD4000 LEAK DETECTOR



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PRECISION, PERFORMANCE AND PORTABILITY
FOR ADVANCED LEAK DETECTION

Ensuring productive outcomes

Identifying, mitigating, and fixing leaks is vital to maintaining production levels across many industries. The ELD4000 leak detector from Edwards Vacuum has been designed to meet the rigorous demands of the semiconductor, R&D and industrial markets. It brings world class accuracy, speed, performance levels, and reliability, ensuring that even the smallest leaks are identified swiftly and precisely.

Your benefits:



Fast and accurate:

Delivers quick and reliable leak detection with high stability and repeatable accuracy you can rely on.

Powerful versatile performance:

High pumping speeds, rapid start up times, and operable in both 'vacuum' and 'sniffer' mode.

Fully mobile:

Lightweight, mobile and compact, making it the ideal choice for diverse applications or compact environments.

User-friendly interface:

Intuitive controls and a large rotatable colour touchscreen for enhanced usability and functionality.

Cost efficient:

Low energy consumption, paired with a long-life ion source ensures cost-effective operation.

Ready to use out of the box:

Your ELD4000 arrives fully assembled, performance tested, and leak checked. Providing you with a safe, convenient plug-and-play leak detection system that you can rely on.

ENGINEERED FOR EXCELLENCE

Performance:

- Versatile: integrated 'vacuum mode' for advanced leak detection, and 'sniffer mode' for full leak identification.
- High pumping speed: the nXR60i multistage roots backing pump delivers a peak pumping speed of 60 m³/h for quick pump down.
- Fast and accurate: high stability and excellent repeatable accuracy with long term stability.
- Quick start-up: ready to go in 2 minutes ensuring minimal downtime.
- Measurement sensitivity: uses helium or hydrogen as tracer gases, ideal for semiconductor applications.



User friendly interface:

- Large rotatable touchscreen: intuitive menu and controls for ease of use.
- Data logging and capture: easy access to detailed analysis and recorded data.
- On-board diagnostics: advanced error checking and diagnostics.
- Remote control: available as an accessory for challenging environments.

Reliability:

- Modular design: for maximum uptime, and designed for easy service
- High stability: delivers consistent and precise measurements.
- Long term reliability: built with high-quality components, able to maintain performance across a range of applications.

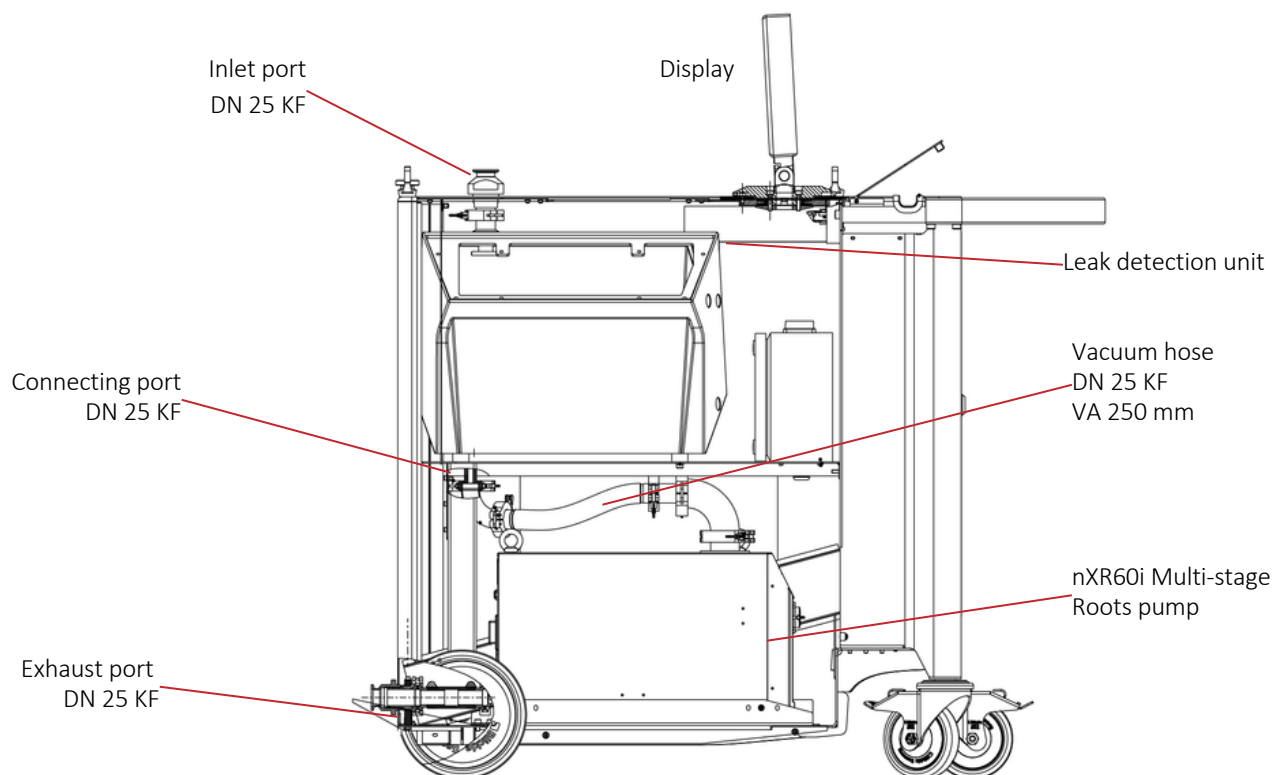


Quick and Ready-to-Use:

- Fully mobile & lightweight: With its small footprint weighing in at only 100 kg the ELD4000 can easily be moved or positioned, and is ideal for use in confined spaces.
- Turnkey approach: No assembly required, quick start-up times, and ready to use out of the box.
- Accessories storage: Convenient 'garage' storage for accessories and instruments.
- Fit for purpose: enclosed on all side with lockable cabinet, removeable gas tray (with safety chain), and holders for sniffer line and helium spray gun.



ELD4000 at a glance:



Applications



Semiconductor Industry

The ELD4000 was developed to meet the demanding needs of the semiconductor industry, providing precise leak detection essential for maintaining the integrity of vacuum systems in chip manufacturing processes. Certified for semiconductor industries; UL & CSA, Semi S2, and Semi S8.

Analytical Instruments

Ideal for laboratories and research facilities, the ELD4000 offers accurate measurements and reliable performance, ensuring the highest standards of data integrity.

Research and Development

Supports various R&D applications where precise leak detection is crucial for experimental accuracy and equipment reliability, and in environments where mobility is key.

High Energy Physics

Ensures the reliability and safety of vacuum systems in high energy physics applications, providing precise leak detection capabilities essential for experimental setups and equipment maintenance.

Industrial

Versatile enough for a wide range of industrial applications, the ELD4000 ensures consistent and repeatable results in production line environments.

TECHNICAL INFORMATION

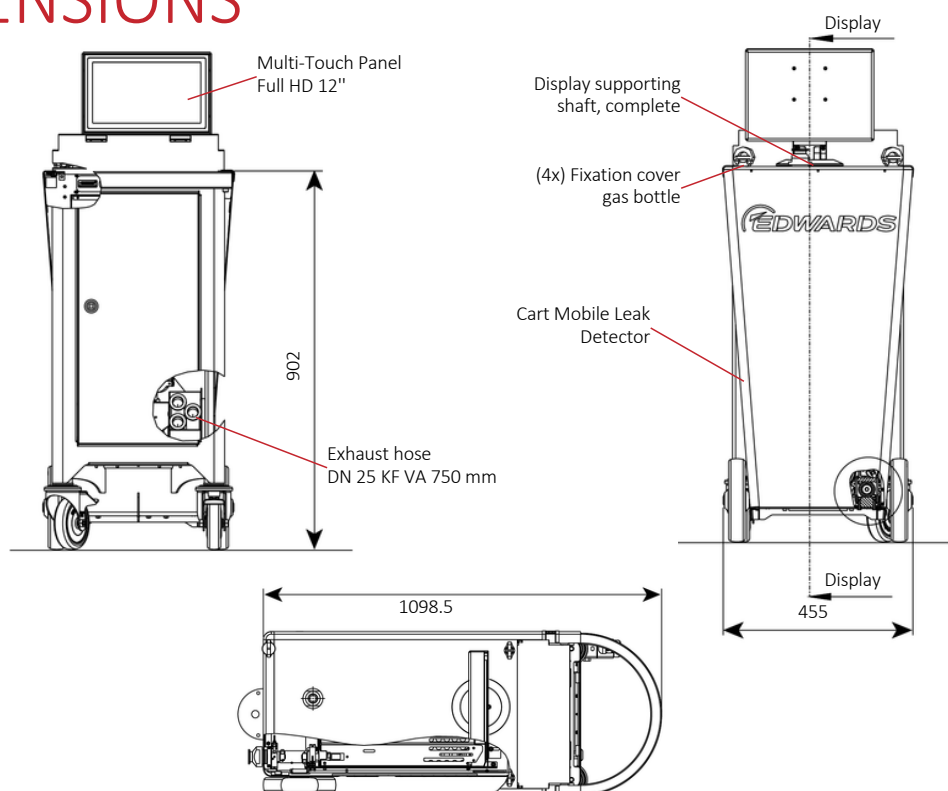
	Unit	Value
Detection range		
Min detectable leak rate for He (vacuum mode)	mbar l/s	< 5 x 10 ⁻¹²
Min detectable leak rate for He (sniff mode)		< 1 x 10 ⁻⁹ (*)
Pumping speed		
Backing capacity	m³/h	60
Helium pump speed		
Gross	l/s	0.04
Fine		1.2
Ultra		> 3.1
Reaction times		
Max inlet pressure	mbar	15
Startup time	s	< 110
Response time	s	< 1
Technical Specification		
Inlet flange		DN25
Interface		RS32, I/O Ethernet, Wi-Fi, EDHUB
Noise level	dB(A)	< 57
Operating temperature	°C	0-35
Supply voltage		100-120V at 60Hz 220-240V at 50Hz
Power consumption	W	750
Weight	kg	100
Dimensions		
Length	mm	1100
Width		455
Height		902 plus foldable screen (for transportation)
IP Rating		20
Certification		NF EN-60204 -2006 / NF EN-50581 -2013
		EN ISO 12100 / NF EN-50581 -2011
		EN 5081 / EN 61326
		SEMI S2-0821Ec / SEMI S8-0218

* 1×10^{-9} only under special conditions, see manual for further details

ORDERING INFORMATION

Product	Part Number
ELD4000, 200-240V, 50/60Hz (stand-alone)	D13544000
ELD4000, 100-120V, 60Hz (stand-alone)	D13544001
ELD4000, 200-240V with accessories ELD500 RC - Wireless - Remote Control ELD+, 4m Sniffer Line, LED/ZERO Test gas spray gun, with hose Bracket gas bottle	D13544010
ELD4000, 100-120V with accessories ELD500 RC - Wireless - Remote Control ELD+, 4m Sniffer Line, LED/ZERO Test gas spray gun, with hose Bracket gas bottle	D13544011
Accessories	Part Number
ELD500 RC - Wireless - Remote Control	D13550110
Test gas spray gun, with hose	16555
Bracket gas bottle	D16559
Test leak TL7, hand valve	D14210
Test leak TL8, hand valve	D16557
Test leak TL9, hand valve	D14408
ELD+, 4m Sniffer Line, LED/ZERO	D13550320
Sniffer test leak STL4	D12237
Sniffer test leak STL5	D12238
Sniffer test leak STL6	D12239
Partial Flow System ELD 200-240V	D13550403
Partial Flow System ELD 100-120V	D13550406

DIMENSIONS





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