

The fully-automated solution for cryogenic biorepositories

## IRELEC compact Automated System



IRELEC compact Automated System is a fully-automated and secure cryogenic storage system. It gives biorepositories the opportunity to achieve best-in-class safety and quality standards, while keeping their existing equipment and storage architecture.

IRELEC compact Automated System protects samples during their whole life, from storage to retrieval. It exclusively retrieves the requested samples and manages the critical operations in nitrogen cooled areas, dramatically improving the cold chain.

Thanks to IRELEC compact Automated System easy LIMS connection, all needed tasks can be programmed by the user through his usual software interface. The automated system carries out all operations: tank opening, rack and box retrieval, samples transfer through the shuttle box.

IRELEC compact Automated System can manage 1 to 4 cryogenic tanks.



# IRELEC compact Automated System

## Main features

<b>Storage</b>	Up to 72,000 samples stored in cryo-tubes (2 mL) with Compact-4
	Vapor or liquid phase cryogenic storage
<b>Safety</b>	Physical barrier interfaced with safety PLC
	Oxygen detector interfaced with safety PLC
	Interfaces for GN <sub>2</sub> extraction
<b>Cold chain management</b>	Sample temperature maintained below - 135°C
	Sample transfer station cooled down with LN <sub>2</sub>
<b>Traceability</b>	100% control
<b>Human-machine interface</b>	Access drawer for samples deposit or retrieval (in shuttle box)
	Local HMI with touchscreen
	Connection with LIMS
<b>Regulations</b>	Compliant with European Directives <b>CE</b>

## Technical specifications

	<b>Compact-2</b>	<b>Compact-4</b>
<b>Dimensions (w x d x h)</b>	2.80 x 2.85 x 2.95 m	3.90 x 2.85 x 2.95 m
<b>Weight</b>	1 700 kg	2 500 kg
<b>Cryogenic tanks</b>	Up to 2 tanks	Up to 4 tanks
Standard configuration	Tanks with full opening lid Ø 700 mm max.	
On-demand configuration	All kind of tanks	
<b>Power supply</b>	400 V / 32 A (robot controller) 230 V / 16 A (PLC)	
<b>LN2 supply</b>	Nominal / Minimal pressure: 3 bars / 1 bar	
<b>Compressed air</b>	Min. 6 bars; 5 l/min; 10 µm filtering	
<b>Communication with LIMS</b>	Communication via FTP and/or Remote access via web application	



Phone: +33 (0)4 76 44 12 96

[irelec@irelec-alcen.com](mailto:irelec@irelec-alcen.com)

irelec-alcen.com

20 rue du tour de l'Eau | F-38400 St Martin d'Hères

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