For scientific applications

The future of refrigeration control solutions in science

iJS for scientific applications

iJS was created to equip the best OEM machines, offering a new platform with CAREL's extensive know-how on electronic controls. A dedicated usability design and specific options to ensure top-level reliability and performance, combined with a comprehensive IoT offer, make iJS the best choice for the scientific refrigeration sector.

New historical data storage function: goodbye manual management

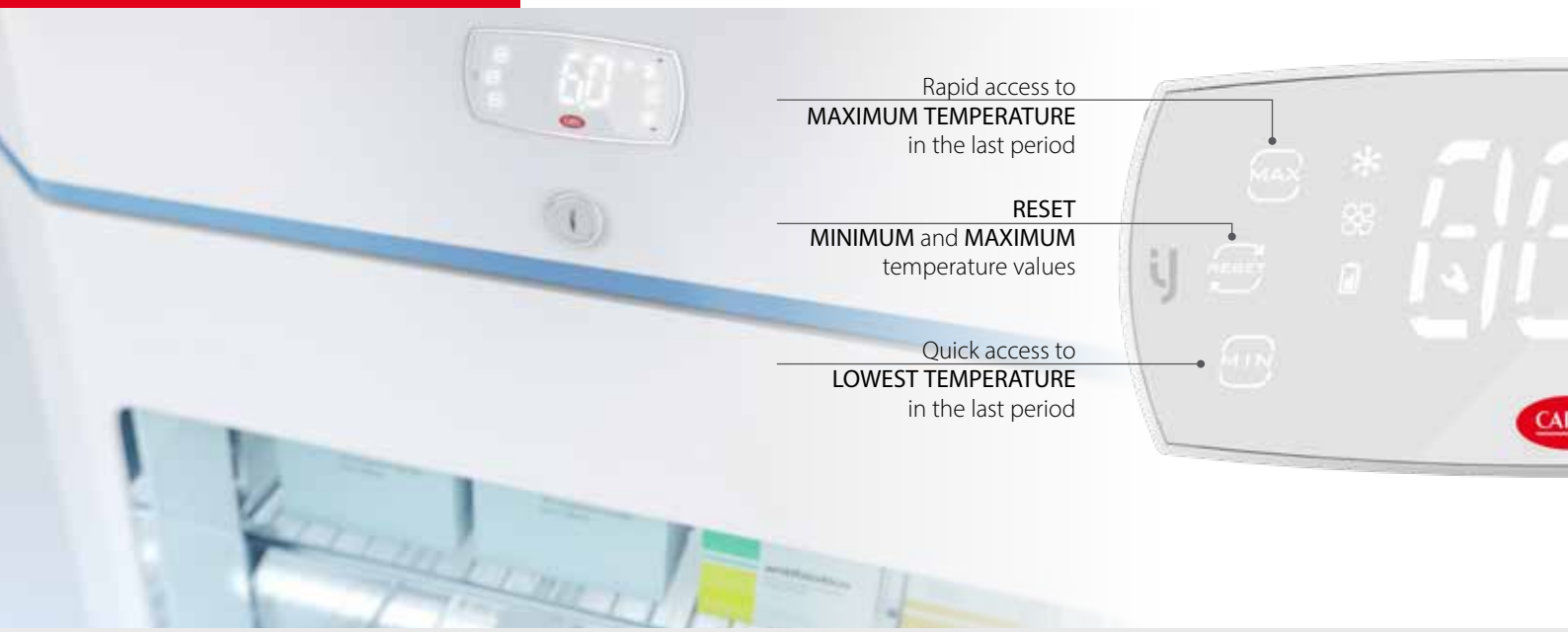
- maximum and minimum temperature automatically historicised
- historical blackout events and alarms always available and ready for export
- up to 5 months of historical details stored in IJS memory.

iJS is the new CAREL control platform designed for scientific applications. It builds on CAREL's extensive know-how in the professional and commercial refrigeration market, expanding its offer with significant technological developments.

Numerous functions are dedicated to scientific applications to ensure maximum final solution stability.

Various integrated options are also available to improve energy efficiency, storage quality and reduce the environmental impact of the unit operation.

iJS makes connectivity one of its winning cards with the integrated NFC and Bluetooth antennas for interaction with local apps and the ability to interface with dedicated cloud portals via Carel gateways thanks to the on-board RS485 port.



Usability

Dedicated keyboard to simplify everyday interactions. Enhanced user experience through the use of specific apps.

Reliability

Extreme reliability thanks to the integrated battery module to ensure temperature monitoring even during power outages.

Features

Dedicated logics for managing specific technical solutions for applications operating at ultra-low temperature (<-50°C).

Freezers

Refrigerators

Ultra-low temperature freezers

System reliability under all conditions

IJS is the ideal solution to achieve energy efficiency and reliability targets for refrigerated units. IJS, within the IJ product platform, stands out thanks to dedicated functionality for scientific applications, such as:

- **Dedicated simple and intuitive keyboard** to complete daily operations as required by the regulations
- **Bluetooth connectivity** for fast history exporting
- Monitoring of temperature, blackout events and alarm list
- **Integrated battery backup** that keeps the IJS control active even during a power failure to ensure temperature monitoring under all conditions
- **UltraLowTemperature ready** with logic for managing cascade circuits and related alarms, as well as compatibility with specific probes for <-50°C applications.

Quick and easy adoption of VCC solutions

Modulating load control

Accurate humidity control

Direct BMS connection

NEW

Integrated battery backup port

Simply connected

On site

The unit in your hands thanks to dedicated apps, Applica and Controlla, with Bluetooth and NFC connectivity

END USER

OEM

SERVICE

With remote monitoring

Unit control 24/7, thanks to the dedicated cloud portal, RED control

+3000231EN - 1.1 - 11.10.2023

Available versions

Characteristics	small		large	
Model	Panel mounting 	Split 	Panel mounting 	Split 
	all in one	stand-alone operation or coupled with HMI small	all in one	stand-alone operation or coupled with HMI small or large
Power supply	100-240 Vac			
Display	Up to 6 customisable buttons	-	Up to 8 customisable buttons	-
Analogue inputs	up to 2 temperature probes		up to 3 temperature probes	
Digital inputs	1 multifunctional temperature probe; 1 voltage-free contact			
Digital outputs	Up to 4 relays		Up to 6 relays	
Connectivity	NFC, Bluetooth, RS485			
Extra (mutually exclusive) functionality	Serial VCC			
	Modulating load control			
	Humidity management			
	Backup battery NEW			

Optional user interface for SPLIT versions

Characteristics	small	large
Model	HMI 	HMI 
	display only	
Power supply	12 Vdc (supplied by the control unit)	
Analogue inputs	-	1 temperature probe
Digital inputs	1 multifunctional probe	1 multifunctional probe; 1 voltage-free contact
Connectivity	NFC and Bluetooth	

Headquarters

CAREL INDUSTRIES HQs
Via dell'Industria, 11
35020 Brugine - Padova (Italy)
carel@carel.com

Authorized distributor

Arion S.r.l.
Sede oprativa:
Via Pizzo Camino, 28
24060 Chiuduno (BG) - Italy
www.arionsensors.com

C.R.C. S.r.l.
Via Selva di Pescarola 12/9
40131 Bologna - Italy
info@crc-srl.net
www.carel.com

ENGINIA S.r.l.
Viale Lombardia, 78
20056 Trezzo Sull'Adda (MI) - Italy
www.enginiasrl.com

HygroMatik GmbH
Lise-Meitner-Straße 3
24558 Henstedt-Ulzburg - Germany
www.hygromatik.com

Klingenburg GmbH
Brüsseler Str. 77
45968 Gladbeck - Germany
www.klingenburg.de

Klingenburg International Sp. z o.o.
ul. Metalowców 5
PL-58-100 Świdnica, Poland
www.klingenburg.pl

RECUPERATOR
Via Valfurva 13
20027 Rescaldina (MI) - Italy
www.recuperator.eu

Sauber
Via Don Doride Bertoldi, 51
46047 Porto Mantovano (MN) - Italy
www.sauberservizi.it

Senva
1825 NW 167th Pl, Beaverton,
OR 97006, Stati Uniti
www.senvainc.com