SMART LABORATORY OVEN

Code : G031



- The ALFA Smart Laboratory Oven is an advanced thermal processing unit designed for laboratories requiring precision, efficiency, and connectivity. Ideal for heating, drying, aging, curing, sterilizing, and moisture content determination, it provides superior performance with programmable smart features for automated thermal workflows.
- Constructed for robust daily use, the oven ensures uniform temperature distribution through forced convection, facilitated by a rear-mounted air circulation fan. The corrosion-resistant stainless steel internal chamber, surrounded by thick mineral wool insulation, optimizes thermal efficiency and safety. The powder-coated or stainless steel exterior adds durability to the oven.
- Featuring a wide, front-loading door with industrial-grade hinges and ergonomically designed handles, the oven guarantees smooth, secure, and lasting access. The internal depth is optimized for ease of sample handling and better use of lab space. Wire grid shelves and multiple shelf positions ensure even airflow and accommodate various specimen sizes.
- The digital PID temperature controller offers precise control from ambient to 250°C. Safety is ensured with an overheat protection thermostat and circuit breaker. All units are delivered with a 9-point factory

calibration report, ensuring temperature uniformity and compliance with laboratory quality systems.

- The Smart Series enhances functionality with:
  - 3.5” Touchscreen Display: Enables intuitive operation and real-time status monitoring.
  - Programmable Multi-Step Control: Define complex heating/waiting sequences for reproducible testing.
  - PC Connectivity & Software: Supports data-logging, remote control, and report generation via included PC software, fully compatible with ALFA Cloud®.
  - ALFA Cloud® Subscription: Enables remote monitoring and cloud-based test data storage (exclusive to Smart Ovens).
  - Thermal Printer Integration: Optional accessory for on-site printouts of test logs and parameters.
  - Maintenance is straightforward with accessible internal components, while an integrated exhaust port accelerates cooling and humidity release.
- Tailored customization options are available to meet specific laboratory needs.

STANDARDS

ASTM C127 • ASTM C136 • ASTM D558 • ASTM D559 • ASTM D560 • ASTM D698 • ASTM D1557 • ASTM D1559 • EN 932-5 • EN 1097-5 • BS 1377:1 • BS 1924:1

TECHNICAL SPECIFICATIONS

- Temperature Range: Ambient to 250°C
- Control System: Touch Screen Digital Thermostat with PID Control
- Smart Controller: 3.5” Touchscreen with programmable multi-step heating and holding cycles
- Connectivity:
  - PC Interface for real-time monitoring and data logging
  - Supplied with PC Software (ALFA Cloud® Compatible)
  - Optional Thermal Printer Integration
- Safety Features:

  - Integrated Safety Thermostat to prevent overheating
  - Circuit Breaker for electrical protection
- Chamber Material: Corrosion-resistant Stainless Steel
- Exterior Finish: Powder Coated or Textured Stainless Steel
- Insulation: Thick mineral wool for optimal thermal efficiency
- Fan Speed Control: Adjustable via touchscreen interface for optimized airflow and thermal uniformity
- Exhaust System: Electronically adjustable flap controlling air discharge
- Shelving: Adjustable wire grid shelves for uniform airflow and flexible sample placement
- Power Supply: [220 – 240 V / 50 – 60 Hz] or [380 V / 50 – 60 Hz]

EQUIPPED WITH

- Touch screen programmable controller
- Safety overheat thermostat
- Circuit breaker
- Fan with adjustable speed
- Exhaust hole with adjustable flap
- Robust, industrial-grade hinges
- Ergonomically designed handles to ensure reliability during frequent use

SUPPLIED WITH

- Wire Grid Shelves: 2 ea (Additional shelves can be ordered)
- 9-Points Factory Calibration Report

ORDERING INFORMATION

Item Name	Item Code
SMART LABORATORY OVEN - 1000 lt - Stainless Steel	G031J01KU
SMART LABORATORY OVEN - 2000 lt - Stainless Steel	G031J02KU
SMART LABORATORY OVEN - 80 lt - Stainless Steel	G031J080U
SMART LABORATORY OVEN - 120 lt - Stainless Steel	G031J120U
SMART LABORATORY OVEN - 250 lt - Stainless Steel	G031J250U
SMART LABORATORY OVEN - 250 lt (Double Door, Benchtop) - Stainless Steel	G031J252U
SMART LABORATORY OVEN - 400 lt - Stainless Steel	G031J400U
SMART LABORATORY OVEN - 500 lt - Stainless Steel	G031J500U
SMART LABORATORY OVEN - 600 lt - Stainless Steel	G031J600U
SMART LABORATORY OVEN - 750 lt - Stainless Steel	G031J750U
SMART LABORATORY OVEN - 1000 lt	G031X01KU
SMART LABORATORY OVEN - 2000 lt	G031X02KU
SMART LABORATORY OVEN - 80 lt	G031X080U
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SMART LABORATORY OVEN - 600 lt	G031X600U
SMART LABORATORY OVEN - 750 lt	G031X750U