

Genlab PRIME XL Laboratory Oven



Stock No	OF2677J
Manufacturer	Genlab
Model	PRI/1600H/TDIG PRIME XL
Year of Manufacture	2023
Serial	23F003
Condition	From a working environment, Excellent Condition
Internal Size (WxDxH mm)	1200 x 1150 x 1240mm, 1600L Capacity
Max Temp	100°C
Other Info	415 Volts : Elements = 3.6kW
Location	Our Central Warehouse, Aldridge, UK
Weight (kgs)	500kg
External Dimensions (WxDxH mm)	1600 x 1600 x 1600mm

Description

The Genlab 1600H Prime XL multi-purpose incubator is a high capacity, fan assisted unit engineered for demanding industrial, R&D, and production environments. Built to Genlab's high manufacturing standards, these ovens offer an enhanced temperature accuracy and an extended operating range up to 100°C.

Suitable for uniform heating for a wide variety of laboratory and production applications.



Featuring a robust heavy duty panelled construction, a mirror polished stainless steel chamber, reinforced shelving for increased load capacity, and precision PID temperature control via the intuitive TDIG touchscreen controller.

Temperature Specification

- **Fast, uniform heating** – Incoloy sheathed heating elements, positioned within the side fan duct, provide rapid heat-up and excellent temperature distribution throughout the chamber.
- **Wide operating range** – Reliable temperature control from ambient +8°C to 100°C for a broad range of incubation applications.
- **Outstanding precision** – 0.1°C control resolution with <0.4°C control accuracy ensures repeatable, dependable test conditions.
- **Excellent temperature stability** – Maintains $\pm 0.2^\circ\text{C}$ stability at 37°C for consistent incubation performance.
- **Uniform chamber conditions** – Achieves $\pm 1.0^\circ\text{C}$ temperature uniformity at 37°C, helping ensure reliable results across the entire load.
- **Quick to operating temperature** – Reaches 37°C in approximately 20–22 minutes, reducing waiting time between test cycles.
- **Rapid temperature recovery** – Returns to setpoint in around 5 minutes after a 30-second door opening, minimising disruption to sensitive samples.
- **Enhanced safety protection** – Independent Pt100A overheat protection with configurable alarms and automatic or manual reset safeguards both the chamber and valuable contents.

Controls

- **Intuitive 3.2" colour touchscreen** – TDIG PID controller with real-time clock for simple, user-friendly operation.
- **Dual sensor protection** – Independent Pt100A control and overheat sensors deliver accurate temperature regulation with built-in safety.
- **Advanced process programming** – Configure countdown timers, 8-stage profiles, cyclic operation and 24/7 scheduling to automate complex heating cycles.
- **Comprehensive data logging** – Monitor temperature trends for up to 48 hours on-screen, with USB export of raw process data and energy consumption.
- **Integrated energy monitoring** – Built-in kWh meter helps track power usage and improve operational efficiency.
- **Customisable operation** – Advanced control features can be enabled or disabled to suit specific applications, with optional alarm output upgrades available.
- **Convenient access** – Side-mounted control panel provides easy operation while maximising chamber accessibility.

Construction

- **Robust industrial construction** – Structural steel frame with a powder-coated exterior for long-lasting durability.
- **Stainless steel chamber** – 304 polished stainless steel interior offers excellent corrosion resistance and easy cleaning.
- **Thermal efficiency** – High density insulation and high-temperature silicone door seals minimise heat loss and improve energy efficiency.
- **Uniform heating** – Fan assisted horizontal airflow ensures consistent temperatures throughout the chamber.



- **Easy loading access** – Twin horizontal doors provide convenient access to large or multiple product loads.
- **Flexible shelving system** – Adjustable stainless steel shelves with 30–40kg capacity per shelf accommodate a wide variety of products and sample sizes.
- **Built for mobility** – Heavy-duty castor wheels allow the incubator to be easily positioned within laboratories or production environments.

Dimensions & Capacity

- **Internal Volume** – 1600 Litres
- **External dimension (WxDxH)** - 1600 x 1600 x 1600mm
- **Internal Dimensions (WxDxH)** - 1200 x 1150 x 1240mm
- **Weight** ~ 500kg (TBC)

Electrical Requirements

- 415 V AC, 3 phase + N + E

Safety Systems

The built in safety system provides reliable protection through an independent overheat probe, configurable alarm limits, and hysteresis control. With flexible reset options and intelligent power-failure behaviour, the system can either enter a safe standby mode or automatically resume operation to the default setpoint, ensuring secure and controlled performance.

Photographs taken prior refurbishment. Our refurbishment service is not available on all machines.