

# Laboratory ovens

## XU range

### STANDARD



These ovens are suitable for many thermal processes : heated storage, heat treatment, thermal testing, sterilization, aging processes and conventional or complex drying processes in every laboratory and every industry.

All laboratory ovens are ventilated for the best temperature accuracy and homogeneity in the volume.

- Temperature range : from +10°C above ambient up to +300°C
- Regulation stability under  $\pm 0,2^{\circ}\text{C}$
- Homogeneity in volume :  $\pm 1,2^{\circ}\text{C}$  at +105°C (9 points measurement)

Dimensions (mm)	Chamber useful			Chamber overall			Useful volume (dm <sup>3</sup> )	Unloaded weight (kg)
	W	D	H	W	D	H		
XU 032	300	270	400	464	566	694	32	39
XU 058	400	360	400	564	656	694	58	50
XU 112	500	450	500	664	746	794	112	65
XU 225	500	450	1000	664	746	1294	225	84
XU 343	700	700	700	864	1092	994	343	123
XU 490	700	700	1000	864	1092	1294	490	148
XU 686	700	700	1400	864	1092	1694	686	178
XU 980	1000	700	1400	1164	1094	1694	980	258

\*certain options may change these dimensions

## Construction

8 volumes of laboratory oven are available, from 32 litres to 980 litres.

The inner casing is made of bright polished corrosion resistant stainless steel and the outer casing is made of electro-galvanized steel coated with white and blue colours epoxy paint.

No contact between inner and outer casings and an optimized insulation minimize heat dissipation and provide a quick heating up.

Walls and door are insulated with 70mm thick glass wool and 10mm empty space, which ensures low external temperatures and an excellent thermal stability.

A silicone gasket provides a good seal between the door and the oven body and a 2-point door closure seals the door securely.

## Heating

The tubular heating elements are sheathed and made of stainless steel, they are ideally placed in the air blow. No-wear switching (solid state relay) is used for activating and deactivating the heating elements.

## Inside ventilation

The ovens are ventilated. The air flow speeds up the drying process and also evens the temperature distribution within the oven.

Air is drawn into the fan from the centre of the oven and passes over the temperature sensor and the sheathed heater elements. The heated air is distributed around the baffle to both left and right and then re-circulated by the fan.

## Air renewal

Through access vent, fresh air is supplied from the back of the oven.

A 35mm Ø exhaust vent is provided with an adjustable valve to control the exhaust air flow from the front panel.

## Regulation, control, security

The regulation guarantees the highest possible temperature stability. The temperature stability is less than few tenths of degree. The temperature controller is microprocessor based, it provides a high accuracy and offers all functions that users need. Digital LEDs display the set and actual temperatures as well as the remaining process time.

An independent, and adjustable, class 3.1 safety thermostat, with a visual and sound alarm, ensures the safety of the oven and its load.

## Equipment

The 2 supplied shelves are wired grids that can be set on multiple position shelving for convenient loading/unloading. The shelf supports are provided with anti-tilting feature. Additional shelves are available as accessories.

A 20mm diameter porthole with silicone cork is fitted as standard in the left hand wall of the oven.



## Options (to be ordered with the oven)

OPT9006	Door viewing window	OPT9034	Air cooling extractor
OPT9008	Weekly automation with digital timer	OPT9045	Air outlet extractor
OPT9012	Fan and heating stop at door opening	OPT9047	Ø60mm porthole centered on the left wall
OPT9021	Cycles programmer (4 prog. of 16 segments)	OPT9049	3 channels programmer and digital recorder
OPT9030	Factory calibration for 1 point 1 temperature (105, 150 or 200°C)	OPT9058	Door key-lock
OPT9031	Factory homogeneity control for 1 temperature (105, 150 or 200°C)		

## Accessories

ACC9001	Additional shelf	ACC9009	Silicone cork for Ø60mm porthole
ACC9002	Additional reinforced shelf	ACC9013	2 channels portable paperless recorder
ACC9003	Stainless steel waste tray (20mm flange)	ACC9014	4 channels portable paperless recorder with graphic screen
ACC9004	Stacking kit	ACC9015	6 channels portable paperless recorder with graphic screen
ACC9005	Sub-frame	ACC9016	3m length thermocouple J with plug
ACC9006	Sub-frame with casters	ACC9020	Software for recorder 2 channels