



SAFETY MANAGEMENT **A**UTOMATIC **R**APIDITY

TRACEABILITY

Sterilization









TLV SERIES STERILIZATION WITH TOTAL CONNECTIVITY



REPORTING

- · Custom reports
- Data printing
- Editable data formats



STORAGE

- · 10 years data storage to fulfil documentation requirements
- Secure backup





DEVICE MANAGEMENT

- Combine all devices in one account
- · Create programs
- Disseminate programs to all devices



USER MANAGEMENT

- Individual accounts
- · Accounts linked to devices
- User hierarchy



SECURITY

- SSL encryption
- Secure server
- · 100% data privacy



ANNOUNCEMENTS

- Alerts
- · Cycle completion
- · Data processing







- **DIRECT EMAIL OR SMS TO TECHNICAL SERVICE**
- **REMOTE OPERATION** MONITORING
- **REMOTE MAINTENANCE AND DIAGNOSIS**







DEFINE CUSTOM PROGRAMS

- · Long term cycles programming in minutes, hours and days.
- Programs can be labeled.



CHOOSE PROGRAM

- All programs are displayed as icons with name and key data.
- · Programs can be added and deleted.
- Full list steps of each program can be displayed.



◯ VIDEO INSTRUCTIONS

- · All operations are explained in step-by-step videos.
- · Videos for on place staff training.



RUNNING PROGRAM STATUS

- · Current program progress displayed.
- Actual data displayed.
- Elapsed and remaining time displayed.
- · Alarms management.



PROTOCOL HISTORY

- Protocols are stored on the device.
- Target temperature and actual temperature are graphically displayed in numerical format.
- · Error messages displayed with detailed explanation.







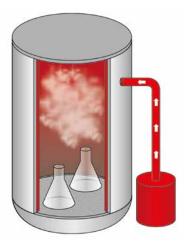


TLV SERIE BASIC

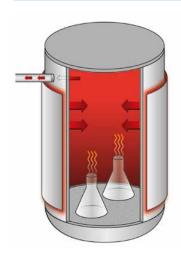
MULTI-PURPOSE AUTOCLAVE FOR STERILIZING SOLIDS AND LIQUIDS
THE TLV SERIES ARE DESIGNED TO COVER THE BASIC STERILIZATION NEEDS IN
ALL TYPE OF LABORATORIES OF INDUSTRIES AND EDUCATIONAL INSTITUTIONS.

- Integrated steam generator (separated into the housing) with automatic filling
- 7" capacitive colour touch screen
- Connectivity to PC, cloud, intranet, LIMS*
- · Bacteriological filter

- Automatic block/unblock system with mechanical assisted door
- · Casters with brake
- · Filtration of exhaust gases
- · Water cooled discharge



SERIE TLV-PD WITH SUPER-DRYING SYSTEM



IT IS THE IDEAL AUTOCLAVE TO STERILIZE SOLIDS THANKS TO ITS DRYING SYSTEM. VERSATILE FOR SOLIDS AND LIQUIDS.

THE TLV-PD SERIES ARE THE BEST ALLY FOR LABORATORIES THAT MUST STERILIZE ALL TYPES OF SOLID PRODUCTS SUCH AS GLASS, PLASTIC VIALS, POROUS OR HOLLOW MATERIAL, WRAPPED AND UNWRAPPED, IN A SAFE, FAST AND VERIFIABLE WAY.

- Integrated steam generator (separated into the housing) with automatic filling
- 7" capacitive colour touch screen
- Connectivity to PC, cloud, intranet, LIMS*
- · Bacteriological filter
- Automatic block/unblock system with mechanical assisted door
- · Casters with brake
- · Filtration of exhaust gases
- Water cooled discharge
- Water-ring pump for quick pre and post vacuum cycles
- · Heating jacket for dry cycle

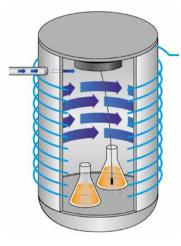
SERIE TLV-FA WITH FAST COOLING SYSTEM

IT IS THE IDEAL AUTOCLAVE FOR STERILIZING LIQUIDS THANKS TO ITS RAPID COOLING SYSTEM. VERSATILE FOR SOLIDS AND LIQUIDS

STERILIZATION OF LIQUIDS IS A COMPLEX TASK THAT REQUIRES A PRECISE CONTROL OF THE LIQUID TEMPERATURE AND A GOOD MANAGEMENT OF THE THERMAL BALANCE DURING THE COOLING PHASE IN THE MINIMUM POSSIBLE TIME.

- Integrated steam generator (separated into the housing) with automatic filling
- 7" capacitive colour touch screen
- Connectivity to PC, cloud, intranet, LIMS*
- · Bacteriological filter
- Automatic block/unblock system with mechanical assisted door
- Casters with brake

- Filtration of exhaust gases
- Water cooled discharge
- Cooling coil refrigeration circuit
- Internal radial fan
- Flexible PT-100 temperature sensor
- Air ballast











Features

	TLV-50	TLV-75	TLV-110*	TLV-150*			
Chamber dimensions Ø x H usable	400 x 450 mm	400 x 650 mm	500 x 600 mm	500 x 850 mm			
Chamber volume total / usable	58 / 56 L	83 / 81 L	124 / 118 L	169 / 155 L			
External dimensions L x D x H	610 x 870 x 1000 mm	610 x 870 x 1080 mm	710 x 970 x 1320 mm	710 x 970 x 1400 mm			
Weight	140 Kg	150 Kg	195 Kg	210 Kg			
Power	3600 W		6000 W	9000 W			
Electrical voltage**	230 (1P	+N+E) V	400 (3P+N+E) V				
Frequency	50 / 60 Hz						
Working temperature range	100 - 140 °C						
Maximum working pressure	2,6 barg						
Maximum design Temperature/Pressure	143 °C / 2,9 barg						

^{*} Under request.

Specifications

		TLV	TLV-PD	TLV-FA
Integrated steam generator separated into the housing		✓	✓	~
Automatic block/unblock system		✓	~	~
Mechanical assisted door		~	✓	✓
Fast cooling		-	-	~
Pre-vacuum		✓	✓	~
Post-vacuum		=	✓	-
Air exhaust filtration		✓	✓	~
Water ring vacuum pump		=	✓	-
Internal radial fan		=	-	✓
Steam exhaust condensation with cold water		✓	✓	✓
Autofill: automatic purified water feed for	r steam generation	✓	✓	✓
Temperature holding function after the e	nd of program for liquids	✓	✓	✓
Housing and basic frame construction in	stainless steel	✓	✓	~
Lid and pressure vessel construction		316L	316L	316L
Pressure gauge		~	✓	~
4 casters (with brakes in two of them)		✓	✓	✓
Flexible PT-100 temperature sensor		0	0	~
Second flexible PT-100 temperature sensor		0	0	0
5	Integrated	0	0	0
Printer for batch documentation	External	0	0	0
Barcode scanner with label printer		0	0	0
Number of sterilization programs		50	50	50
Password secured access rights for para	meterization	~	~	~
Automatic microprocessor control		~	~	~
7" capacitive colour touch screen		~	~	~
	RS-232	~	~	~
External data transfer	USB	~	~	~
(network compatible)	ETHERNET	~	~	~
	WI-FI	~	~	~
RAYPA CLOUD Basic (extensive documentation/network compatible)		0	0	0
RAYPA CLOUD Premium (extensive documentation/network compatible)		0	0	0
Private cloud server		0	0	0
Internal memory for documentation for sterilization cycles		up to 1.000.000	up to 1.000.000	up to 1.000.000
Data backup via USB reader		~	~	~
Timer for programmable start time		~	~	~
Calculation of F _o value in combination with flexible PT-100		0	0	~
FDA 21 CFR Part 11 and GMP Annex 11 of	0	0	0	
Connection to LIMS***	•	~	~	~
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✓ STANDARD O OPTIONAL

*** LIMS: Laboratory Information Management System















^{**} Ask for other voltages.