TOP LINE AUTOCLAVES

Leading
Lab Technologies

RAYPA

Sterilization

NEW

TLV SERIES

SMART AUTOCLAVES
FOR SMART LABS
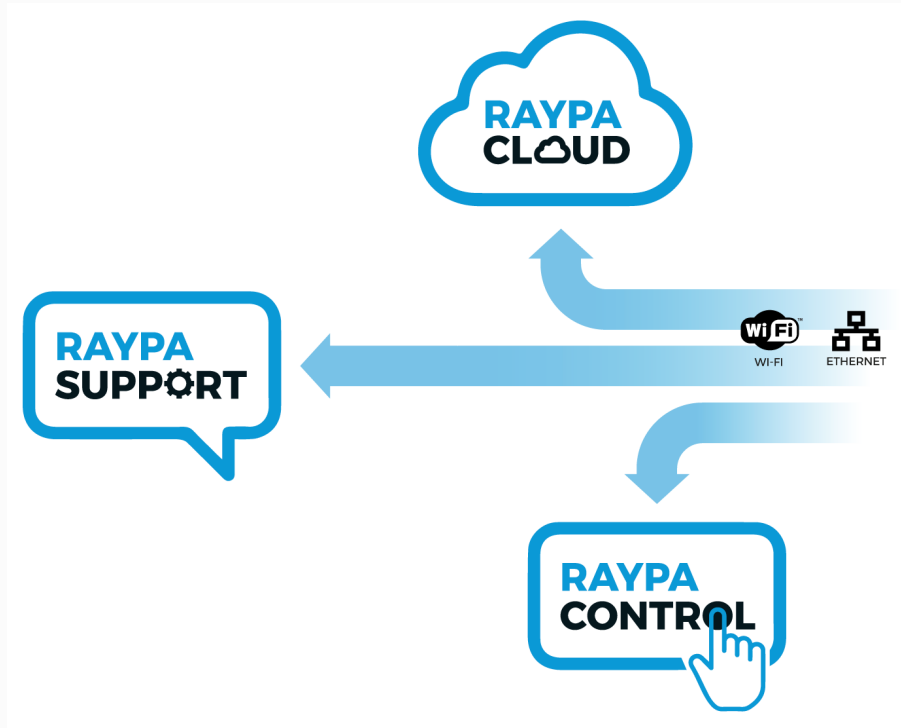
TLV-50

RAYPA
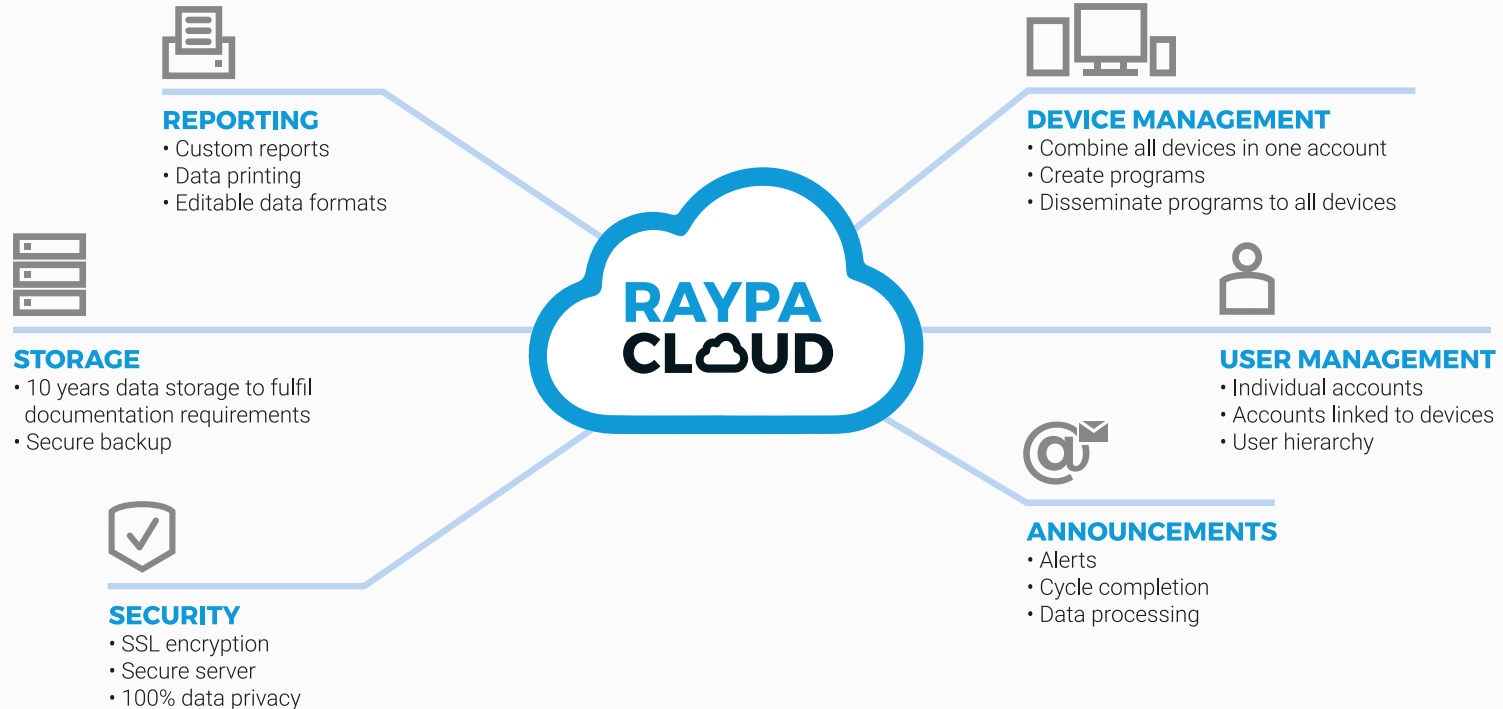
FDA
21 CFR Part 11

GMP
Annex 11

TLV SERIES
Sterilization with total connectivity

Sterilization with total connectivity **RAYPA CLOUD**

REPORTING
- Custom reports
- Data printing
- Editable data formats

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

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

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

ANNOUNCEMENTS
- Alerts
- Cycle completion
- Data processing

TLV SERIES
Sterilization with total connectivity **RAYPA SUPPORT**
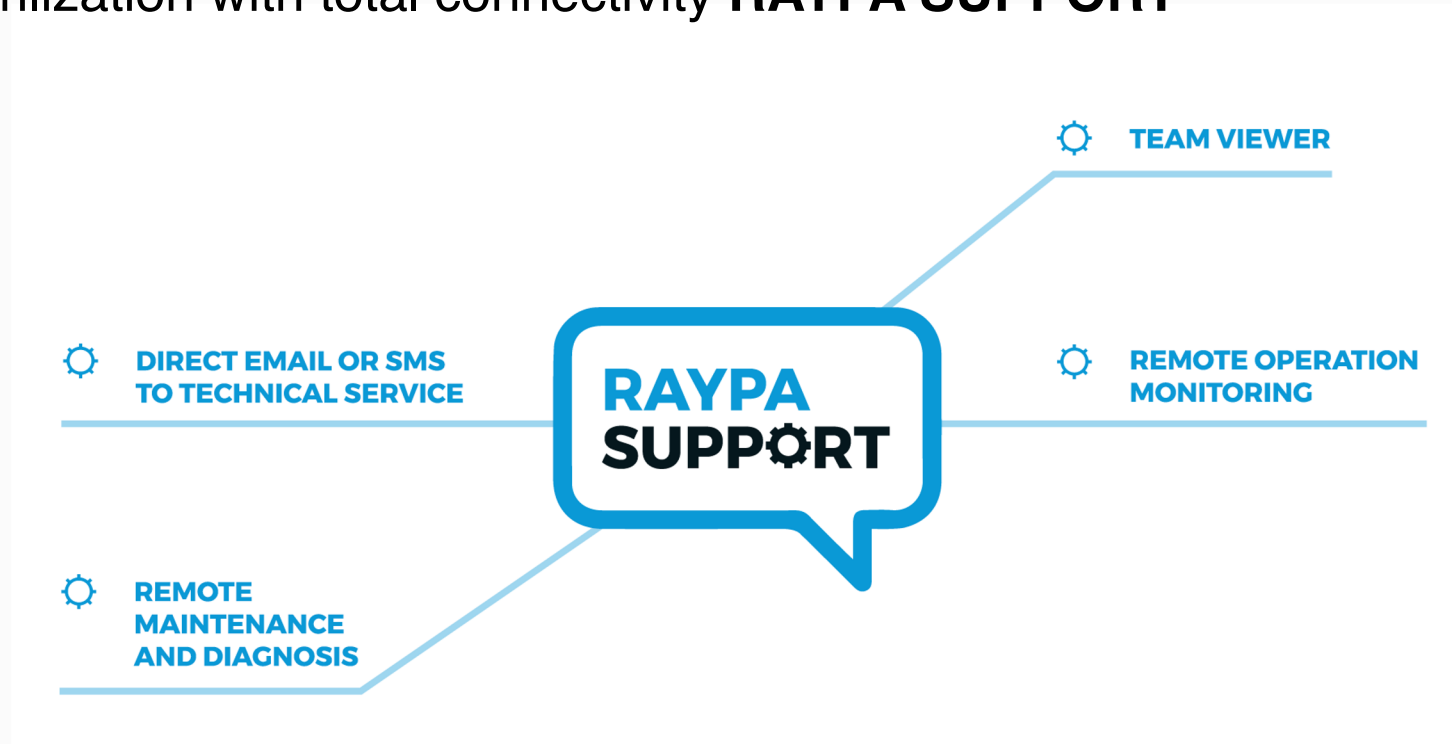
TLV SERIES
Sterilization with total connectivity **RAYPA CONTROL**

☞ **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.

☞ **RUNNING PROGRAM STATUS**
• Current program progress displayed.
• Actual data displayed.
• Elapsed and remaining time displayed.
• Alarms management.

RAYPA CONTROL

☞ **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.

☞ **VIDEO INSTRUCTIONS**
• All operations are explained in step-by-step videos.
• Videos for on place staff training.

RANGES

TLV
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 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

* LIMS: Laboratory Information Management System
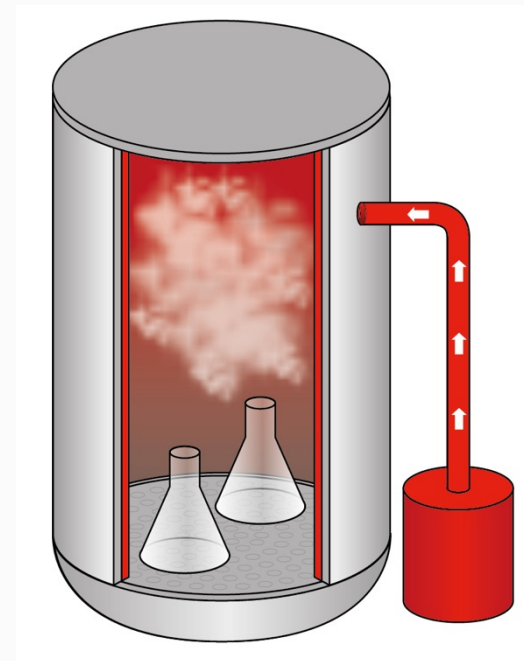
TLV-PD
WITH SUPER-DRYING SYSTEM

**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 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

* LIMS: Laboratory Information Management System
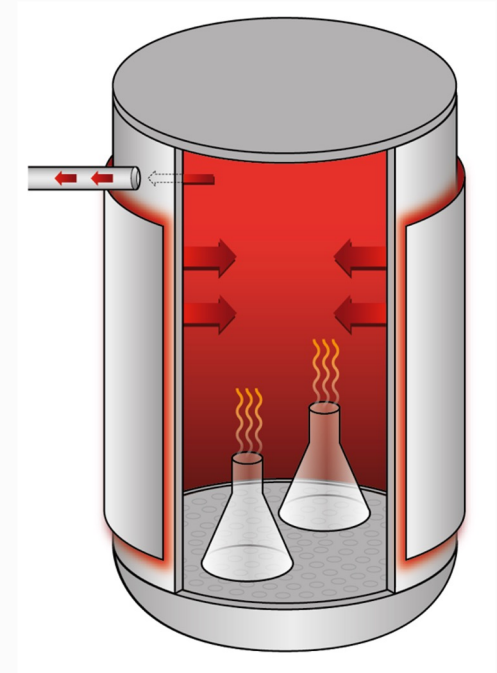
TLV-FA
WITH FAST COOLING SYSTEM

**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 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 (optional)
• Flexible PT-100 temperature sensor

• Air ballast

* LIMS: Laboratory Information Management System
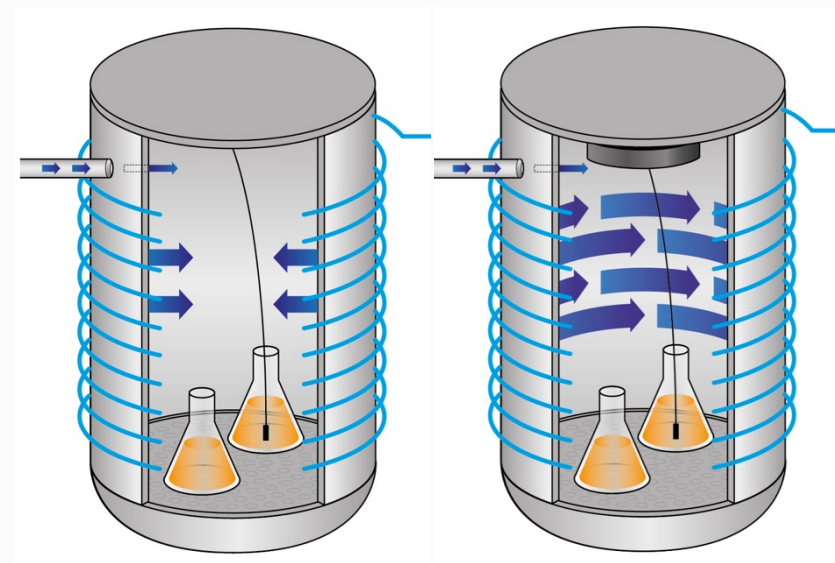
FAN OPTION

TECHNICAL DATA
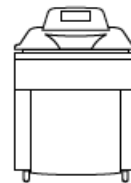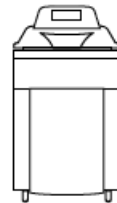
Features

	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 1060 mm	610 x 876 x 1110 mm	710 x 980 x 1160 mm	710 x 980 x 1310 mm
Weight	140 Kg	150 Kg	195 Kg	210 Kg
Power	3600 W		9000 W	
Electrical voltage*	230 (1P+N+E) V		400 (3P+N+E) V	
Frequency	50 / 60 Hz			
Working temperature range	105 - 140 ºC			
Maximum working pressure	2,6 barg			
Maximum design Temperature / Pressure	143 ºC / 2,9 barg			

* Ask for other voltages.

TECHNICAL DATA

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 steam generation		✓	✓	✓
Temperature holding function after the end 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		O	O	✓
Second flexible PT-100 temperature sensor		O	O	O
Printer for batch documentation	Integrated	O	O	O
	External	O	O	O
Barcode scanner with label printer		O	O	O

TECHNICAL DATA

Number of sterilization programs		50	50	50
Password secured access rights for parameterization		✔	✔	✔
Automatic microprocessor control		✔	✔	✔
7" capacitive colour touch screen		✔	✔	✔
External data transfer (network compatible)	RS-232	✔	✔	✔
	USB	✔	✔	✔
	ETHERNET	✔	✔	✔
	WI-FI	✔	✔	✔
RAYPA CLOUD Basic (extensive documentation/network compatible)		O	O	O
RAYPA CLOUD Premium (extensive documentation/network compatible)		O	O	O
Private cloud server		O	O	O
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_0 value in combination with flexible PT-100		O	O	✔
FDA 21 CFR Part 11 and GMP Annex 11 compliance		O	O	O
Connection to LIMS***		✔	✔	✔

✔ STANDARD   O OPTIONAL   *** LIMS: Laboratory Information Management System

ACCESSORIES

ACCESSORIES

ECOPUR-500 – Water purifier

CV-TLV – Stainless steel wire basket

IT/TLV Integrated thermal printer

Certifications

RΛYPΛ

More information

Videos

**Brochures
& Installation
guides**

Thank you!

RAYPA

**Leading
Lab Technologies**

www.raypa.com - www.mediapreparators.com - www.terrafoodtech.com