

# SINGLE USE SUPPORT.

PIONEERING BIOPHARMA

*Compatible with single-use bags  
up to 50L from any manufacturer*



## RoSS.pFTU XL

*Plate-based freezing & thawing  
of up to 500L per batch.*

# Technical Specifications

**RoSS.pFTU XL** is a plate-based freeze-thaw unit for large **volumes of up to 500L per batch**. Based on plates and with direct contact between shells and thermoplate, it enables a controlled and rapid freeze-thaw process for large volumes including vaccines, media, buffer solutions or other drug substances.

## **FREEZE-THAW YOUR DRUG SUBSTANCE**

- Advanced compressible thermoplates
- Shaking option for optimized homogenization
- Compatible with up to 50L single-use bags from any manufacturer\*
- Fully automated & controlled
- With highest possible speed & accuracy

*\*protected by RoSS shell and designed to your preferred bag*



## **Facts:**

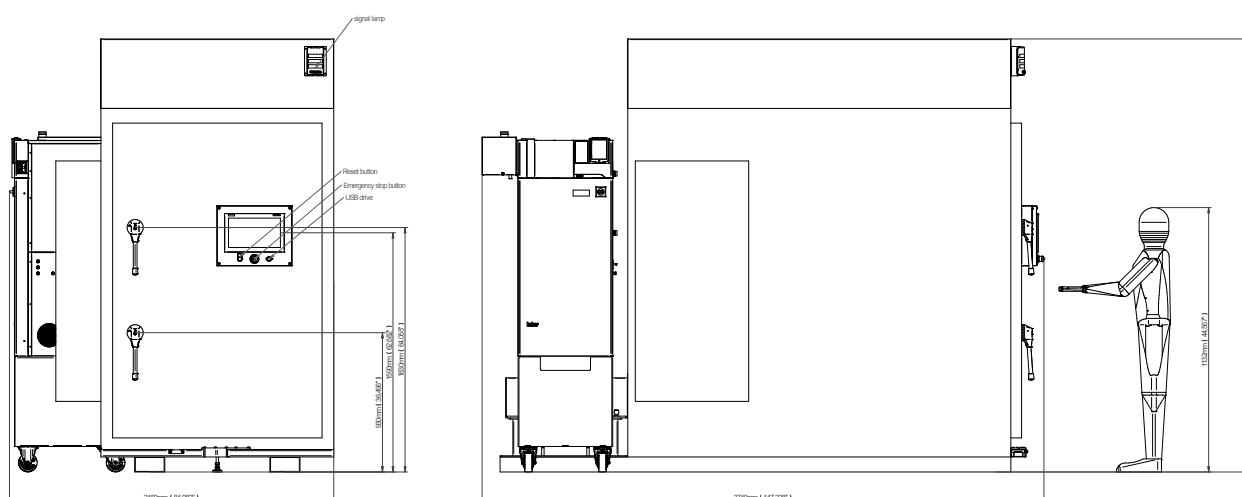
- **Capacity:** 500L per batch
- **Flexible primary packaging:** Choose any single-use bag up to 50L
- **Freezes down to -80°C/-112°F**
- **Thawing** with **integrated shaker** function
- **Technology:** Plate-based freezer for homogeneous freezing of your product
- **Fully automated** freezing and thawing process with no manual handling of single-use bags required
- **RoSS® Shell for protection & secondary packaging:** For best protection and optimized homogeneous freezing we recommend the use of **RoSS® shells** for your single-use bags
- **Simple loading** and unloading of the RoSS shells with a specific external rack
- **GMP-compliant**, automated, at highest possible speed and accuracy



# Technical Specifications

Designed for	any single-use bag protected by RoSS*
Single-use bags	50L
Temperature range	-80°C to +40°C (-112°F to 104°F)
Software	Siemens S7 standardized
Cooling media (plates)	With thermooil
Cooling media (TCU)	CFC- and HCFC-free or natural refrigerants available
Cooling option (TCU)	Water or external chiller
Sound pressure level +/- 4 dB (A)	64 dB (A)
Consumption at water temperature 59°F (15°C)	790 L/h or external chiller
Electricity	EU/CN: 400V 3- 40A 50Hz, US: 480V 3- 35A 60Hz
Min./max. ambient temperature	+15 to +25 °C (+59 to +77 °F)
Max. relative humidity	75%
Dimensions (wide x depth x height)	2160 x 3740 x 2882 mm (85 x 147.2 x 113.5")
Net weight	approx. 3500 kg
Waste heat to surrounding	TCU approx. 200 W/h, cabinet approx. 200 W/h

\*Available for any 2D single-use bag. Find further information in our RoSS product brochure.



## Advantages of controlled plate-freezers



**UNCONTROLLED FREEZING**



**CONTROLLED FREEZING**

The picture on the left illustrates cryoconcentration generated by slow freezing from all sides in a conventional static freezer. **The dark blue spots indicate a higher cryoconcentration.** The picture at the right shows that the ice front within a plate-freezer is growing from top and bottom simultaneously. **Fast & controlled freezing with a plate freezer thus enables a homogeneous freezing result.**



**Single Use Support assists you from beginning to end, offering highly qualified support all along the way. Contact us for further details!**