

## TS and TUS series: Upright and underbench freezers

Small Freezers TS and Underbench Freezers TUS are designed for decentralized freezing and for storage of materials directly at the workplace. With their compact, space saving construction and the quiet refrigeration system (comparable to home freezers, no noise pollution at the workplace) these types are optimized to being placed directly in the laboratory. The freezers are fitted with hermetically sealed, intrinsically safe, air-cooled refrigeration systems and are maintenance free.

### Features series TS:

- Large interior space with small external dimensions due to vacuum insulation (VIP)
- Extremely quiet refrigeration unit
- Microprocessor-controlled regulation with membrane keypad (Standard)
- Touchscreen control with colour display and integrated data logger for full traceability (//logg)
- Maximum safety due to mains-independent alarm with rechargeable battery for approx. 72 hours
- Various interfaces
- Interior made of high-quality stainless steel
- Cable gland (diameter 19mm)
- Insertion grille (stainless steel) variably positionable
- Lockable door latch with lever action
- Insulated door with optimum sealing performance
- one insert grille included in delivery



TS 50-100 //logg

### Features series TUS:

- Large interior space with small external dimensions due to vacuum insulation (VIP)
- Extremely quiet refrigeration unit
- Microprocessor-controlled regulation with membrane keypad (Standard)
- Touchscreen control with colour display and integrated data logger for full traceability (//logg)
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TUS 80-100 //logg

### Options:

- Mobile version for TS series
- Recirculation fan for even temperature distribution throughout the interior

## Technical data TS-series:

	TS 50-100	TS 50-100 //logg	TS 80-100	TS 80-100// logg
<b>Performance Data Temperature</b>				
Controller	Standard	//logg	Standard	//logg
Temperature range [°C]	-10...-50	-10...-50	-50...-80	-50...-80
Control accuracy [± K]	1	1	1	1
Ambient temperature [° C]	+12...+30	+12...+30	+12...+30	+12...+30
<b>Electrical data</b>				
Rated Voltage [V]	230	230	230	230
Power frequency (±10%) [Hz]	50	50	50	50
<b>Outer dimensions</b>				
Width net [mm]	680	680	680	680
Height net [mm]	1160	1160	1160	1160
Depth net [mm]	730	730	730	730
Wall clearance back [mm]	160	160	160	160
Wall clearance sidewise [mm]	100	100	100	100
<b>Internal Dimensions</b>				
Width [mm]	450	450	450	450
Height [mm]	500	500	500	500
Depth [mm]	450	450	450	450
Interior volume [L]	100	100	100	100
Net weight of the unit (empty) [kg]	120	120	120	120

## Technical data TUS-series:

	TUS 50-100	TUS 50- 100//logg	TUS 80-100	TUS 80-100 //logg
<b>Performance Data Temperature</b>				
Controller	Standard	//logg	Standard	//logg
Temperature range [°C]	-10...-50	-10...-50	-50...-80	-50...-80
Control accuracy [± K]	1	1	1	1
Ambient temperature [° C]	+12...+30	+12...+30	+12...+30	+12...+30
<b>Electrical data</b>				
Rated Voltage [V]	230	230	230	230
Power frequency (±10%) [Hz]	50	50	50	50
<b>Outer dimensions</b>				
Width net [mm]	950	950	950	950
Height net [mm]	750	750	750	750
Depth net [mm]	730	730	730	730
Wall clearance back [mm]	160	160	160	160
Wall clearance sidewise [mm]	100	100	100	100
<b>Internal Dimensions</b>				
Width [mm]	450	450	450	450
Height [mm]	500	500	500	500
Depth [mm]	450	450	450	450
Interior volume [L]	100	100	100	100
Net weight of the unit (empty) [kg]	120	120	120	120