

# STR44

## Description

The **STR44** is the smallest member of the STR family. The STR44 has the same width as the STX40 and the same depth as the STX220. Its 44 MTP capacity make it perfectly suitable for small-scale integration, highly miniaturized applications or short time incubation assays. You can use the cassettes for standard plates or the other plate sizes or - if needed - mixing up to two configurations. Throughout can be increased by using two transfer-station positions on the deck. The STR44's compact size makes it ideal for applications with room constraints.

**The STR44 is ideal for protein crystallization work** because the stationary cassettes with the Star concept allowing the periscope the only moving part, reducing vibration and movement of the samples. While allowing full remote access on handling and climate functions, you still are able to manually access the cassettes and samples through the large front door for loading and unloading your product.

The STR44 supports a wide temperature and humidity range. Namely the STR44 is available as IC (Incubation), HC (high humidity cold storage), DC (dry, low humidity cold storage, HR (high humidity wide temperature range incubator) and DR (dry, low humidity wide temperature range storage).

## Capacity

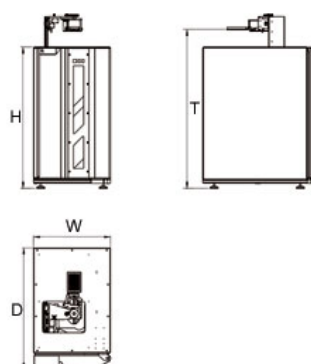
| Plate Type              | Plate Height | Capacity |
|-------------------------|--------------|----------|
| NTP (Nanotiter Plates)  | 5 mm         | 84       |
|                         | 11 mm        | 56       |
|                         | 12 mm        | 54       |
| MTP (Microtiter Plates) | 17 mm        | 44       |
|                         | 22 mm        | 34       |
|                         | 23 mm        | 34       |
|                         | 24 mm        | 34       |
| DWP (Deep Well Plates)  | 27 mm        | 30       |
|                         | 44 mm        | 20       |
|                         | 53 mm        | 16       |
| DiTi200                 | 66 mm        | 14       |
| DiTi1000                | 104 mm       | 8        |

Where low vibration is needed the climate part of the unit can be separated from the incubation chamber. Mechanical dimensions of all STR44s are identical and independent of any Climate Options.

Like all members of the StoreX Star family the STR 44 can be equipped with a large number of further options and a wide selection of useful accessories. For details please refer to Options or Accessories.



## Dimensions



|                     |         |
|---------------------|---------|
| Width (W)           | 486 mm  |
| Depth (D)           | 763 mm  |
| Height (H)          | 857* mm |
| Transfer Height (T) | 1000 mm |

\* add 20 – 35 mm for feet

## Climate

| Type      | Temperature                          | Relative Humidity |                     | Order Nr.  |
|-----------|--------------------------------------|-------------------|---------------------|------------|
| STR44-IC  | 33..50°C (70°C)                      | max. 95 %         | Incubator           | 9147 00 20 |
| STR44-HC  | <sup>1)</sup> 04..25°C               | max. 90 %         | Humid Cooler        | 9147 00 21 |
| STR44-DC2 | <sup>1) 3)</sup> 04..25°C            | 04..50 %          | Dry Storage         | 9118 12 59 |
| STR44-HR  | <sup>1)</sup> 04..50°C (70°C)        | 90..95 %          | Humid Wide Range    | 9147 00 22 |
| STR44-DR  | <sup>1) 3)</sup> 04..50°C            | 02..50 %          | Dry Wide Range      | 9147 00 37 |
| STR44-AR  | <sup>1) 2)</sup> 04..50°C            | 10..95 %          | Humidity Controlled | 9147 00 38 |
| STR44-DF  | <sup>1)</sup> -20..0°C <sup>4)</sup> | 04..45 %          | Deep Freezer        | 9118 12 49 |
| STR44-NC  | -                                    | -                 | No Climate          | 9147 00 43 |

1) Humidity depends on temperature setting

2) Humidity adjustable

3) Adjustable dehumidification

4) up to +20°C on request

## Specifications

| Specifications         |            | STR44-IC   | STR44-HC      | STR44-DC2   | STR44-DR       | STR44-HR         |
|------------------------|------------|--|---------------|-------------|----------------|------------------|
| Application            |            | Incubation   | Humid Cooling | Dry Storage | Dry MultiRange | Humid MultiRange |
| Plate Capacity         | Microtiter |  |               | 44          |                |                  |
|                        | Deep Well  |  |               | 18          |                |                  |
|                        | Nanotiter  |  |               | 84          |                |                  |
| Temperature Range (HT) | °C         | 33..50 (70)  | 4..25         | 4..25       | 4..50          | 4..50 (70)       |
| Temperature Deviation  | °C         | +/- 0.2  | +/- 0.5       | +/- 1       | +/- 1.5        | +/- 0.3          |
| Relative Humidity      | %          | max. 95  | max. 90       | 04..50      | 02..50         | 90..95           |
| Communication          |            | RS232 V24, 9600Baud, ASCII                         |               |             |                |                  |
| User Software          |            | Win32 / Windows NT / Windows2000                   |               |             |                |                  |
| Facility Requirements  |            | 100V / 50Hz; 115V / 60Hz; 230V / 50 Hz; Switchable |               |             |                |                  |
| Power Consumption      | W          | 450  | 400           | 400         | 700            | 500              |

## Handling Specifications

|                   |           |
|-------------------|-----------|
| Mean Access Time: | 21.2 sec. |
| Mean Load Time:   | 20.2 sec. |
| Mean UnLoad Time: | 22.2 sec. |

## Weights and Dimensions

| Unit        | Incl. Cassettes | Net Weight | Tare  | Gross weight | Package | Dimensions cm (LxWxH) |
|-------------|-----------------|------------|-------|--------------|---------|-----------------------|
| STR44-ICIT  | 2               | 117 kg     | 64 kg | 181 kg       | Crate   | 115 x 74 x 147        |
| STR44-HRIT  | 2               | 154 kg     | 64 kg | 218 kg       | Crate   | 115 x 74 x 147        |
| STR44-HCIT  | 2               | 154 kg     | 64 kg | 218 kg       | Crate   | 115 x 74 x 147        |
| STR44-DC2IT | 2               | 154 kg     | 64 kg | 218 kg       | Crate   | 115 x 74 x 147        |

## Options

|   | Order Nr.  |
|---|------------|
| High temperature 70 degrees Celsius capability        | 9118 11 02 |
| Bar Code Reader Option                                | 9118 11 03 |
| Plate Presence Sensor                                 | 9121 00 62 |
| Fast access for time critical applications            | 9111 10 00 |
| Disposal Tips upgrade kit up to 100 mm height         | 9118 12 23 |
| UCI Universal Communications Interface                | 9118 11 17 |
| Liconel self decontaminating incubation chamber       | 9118 12 44 |
| n-Way Decontamination Option                          | 9122 05 28 |
| Steam Injection Option                                | 9118 11 16 |
| Fast CO2 Gassing Option                               | 9118 11 12 |
| Fast N2 Gassing Option                                | 9118 12 13 |
| Fast O2 Gassing Option                                | 9118 11 14 |
| Additional CO2 Gassing Option                         | 9118 11 07 |
| Additional N2 Gassing Option                          | 9118 11 11 |
| Additional O2 Gassing Option                          | 9118 11 08 |
| Shaking option, orbital, 1mm Amplitude, 600 rpm max.  | 9118 12 24 |
| Shaking option, orbital, 1mm Amplitude, 1200 rpm max. | 9118 12 25 |
| Shaking option, orbital, 3mm Amplitude, 600 rpm max.  | 9118 12 41 |
| Shaking option, orbital, 6mm Amplitude, 400 rpm max.  | 9118 12 42 |

## Accessories

|   | Order Nr.  |
|---|------------|
| MTP Cassette, 22 levels, pitch=23mm all stainless steel   | 9118 12 26 |
| Deep-well Cassette, 10 levels, pitch=50mm all stainless steel                                   | 9118 12 27 |
| Custom size Cassette, nn levels, mm pitch all stainless steel                                   | 9118 12 33 |
| MTP cassette, 22 levels, pitch=23mm, all stainless steel for shaker                             | 9121 00 83 |
| Deep-well cassette, 10 levels, pitch=50mm, all stainless steel for shaker                       | 9121 00 84 |
| Custom Size cassette, nn levels, mm pitch (specify plate height) all stainless steel for shaker | 9121 00 85 |
| Standard Transfer Station   | 9147 00 24 |
| Left Side Transfer Station, transfer reach 300 mm   | 9143 01 56 |
| Left Slide Transfer Station, custom size mm   | 9118 12 35 |
| Right Side Transfer Station, transfer reach 300 mm  | 9143 01 57 |
| Dual Slide Transfer Station, transfer reach 300 mm  | 9143 01 58 |
| STX Driver  | 9118 12 48 |
| STX Driver and Database   | 9600 00 01 |
| STX GUI incl. STX Driver and Database   | 9600 00 02 |