

## DualGuard Series ULT freezer

### A USER-FRIENDLY Freezer

- SUS304 interior for easy cleaning & rust free
- Document groove to put paper, create a stylish lab
- Optional electric lock for safety and convenient administration
- Maximum sample storage capacity with an optimum footprint
- Special noise reduction design, a real quite lab partner



### Optimal Capacity

| Product Code | Model       | Capacity (L)                               | 2ml Vial | 2ml Box* | Rack Type | Rack Qty | Total Rack Qty |
|--------------|-------------|--|----------|----------|-----------|----------|----------------|
| SQ-90013DG   | MDF-86U458D | 408  | 28800    | 288      | 5x4 & 4x4 | 8        | 16             |
| SQ-90014DG   | MDF-86U588D | 588  | 40000    | 400      | 5x5       | 16       | 16             |
| SQ-90015DG   | MDF-86U728D | 728  | 50000    | 500      | 5x5       | 20       | 20             |
| SQ-90016DG   | MDF-86U838D | 838  | 60000    | 600      | 5x5       | 24       | 24             |
|              |             | * Notes: calculated based on 100-well box. |          |          |           |          |                |

|                      | Product Code                | SQ-90013DG                            | SQ-90014DG    | SQ-90015DG    | SQ-90016DG     |
|----------------------|-----------------------------|---------------------------------------|---------------|---------------|----------------|
|                      | Model                       | MDF-86U458D                           | MDF-86U588D   | MDF-86U728D   | MDF-86U838D    |
| Technical Data       | Type                        | Upright                               | Upright       | Upright       | Upright        |
|                      | Capacity (L/cu ft)          | 408 / 14.41                           | 588 / 20.76   | 728 / 25.70   | 838 / 29.59    |
|                      | Inner Doors                 | 2 pcs, SUS304 forming door            |               |               |                |
|                      | Shelves                     | 3 pcs, SUS304                         |               |               |                |
|                      | Inner Chamber Material      | SUS304                                |               |               |                |
|                      | Cooling Type                | Direct Cooling                        |               |               |                |
|                      | Refrigerant                 | Hydrocarbon, CFC Free, Non greenhouse |               |               |                |
|                      | Noise Level (dB)            | 50                                    | 51            | 52            | 53             |
| Temperature          | Ambient Temperature (°C)    | 10 - 32°C                             |               |               |                |
|                      | Temperature Range (°C)      | -40°C to -86°C                        |               |               |                |
| Cooling & Controller | Cooling System              | Two independent cooling system        |               |               |                |
|                      | Compressor Board            | SECOP                                 |               |               |                |
|                      | Sensor                      | PT 100                                |               |               |                |
|                      | Controller                  | Microprocessor                        |               |               |                |
|                      | Display & Control           | 7" Touch Screen                       |               |               |                |
| Electronic Parameter | Voltage Frequency           | 220V / 50/60Hz                        |               |               |                |
|                      | Power (W)                   | 845                                   | 815           | 935           | 890            |
|                      | Power Consumption (kWh/24h) | 11.6                                  | 12            | 13.28         | 13.86          |
| Vials Load           | 2ml Vials (Pcs)             | 28800                                 | 40000         | 50000         | 60000          |
| Size & Weight        | Internal (WxDxH) mm         | 606x575x1180                          | 606x738x1310  | 963x558x1350  | 894x718x1310   |
|                      | External (WxDxH) mm         | 891x992x1945                          | 891x1155x1995 | 1248x975x1995 | 1179x1135x1995 |
|                      | Packing (WxDxH) mm          | 954x955x2094                          | 970x1138x2185 | 1320x970x2185 | 1212x1098x2185 |
|                      | Net/Gross weight (kg)       | 292/317                               | 335/363.5     | 380/400       | 397/430        |
| Alarm System         | High / Low Temperature      | √                                     | √             | √             | √              |
|                      | Power Failure               | √                                     | √             | √             | √              |
|                      | Abnormal Voltage            | √                                     | √             | √             | √              |
|                      | Sensor Error                | √                                     | √             | √             | √              |
|                      | Filter Screen Check         | √                                     | √             | √             | √              |
|                      | Controller Failure          | √                                     | √             | √             | √              |
|                      | Low Battery                 | √                                     | √             | √             | √              |
|                      | Condenser Malfunction       | √                                     | √             | √             | √              |
|                      | High Ambient Temperature    | √                                     | √             | √             | √              |
|                      | Door Ajar                   | √                                     | √             | √             | √              |
|                      |                             |                                       |               |               |                |
| Accessories          | Caster Wheels               | 4                                     | 4             | 4             | 4              |
|                      | Test Hole / Diameter        | 1/25mm                                | 1/25mm        | 1/25mm        | 1/25mm         |
|                      | Remote Alarm Contact        | Yes                                   | Yes           | Yes           | Yes            |
|                      | USB Port                    | Yes                                   | Yes           | Yes           | Yes            |
|                      | Temperature Recorder        | Optional                              | Optional      | Optional      | Optional       |
|                      | Freezer Racks               | Optional                              | Optional      | Optional      | Optional       |
|                      | CO2 Backup System           | Optional                              | Optional      | Optional      | Optional       |
|                      | LN2 Backup System           | Optional                              | Optional      | Optional      | Optional       |