

Revolution 300 Series

Revolution Core Features

- Configurable text and email notifications / web access
- Limited battery backup, gas bypass
- Operation at -190C Vapor phase with extended hold
- 360° LED internal light
- Built in extraction fan to clear fog
- Dual, redundant level measurement system
- Coordinated and/or timed filling
- Hinged, auto-locking lid with access control
- Stabilized carousel with top and bottom bearings
- Drilled manifold and direct plumbing connections
- Fold-down full-sized step

Revolution+

(All Core Features Plus Up to 4 Options)

- Radiance Cooling maximum temperature & liquid level management
- RFID badge user access
- Motorized tray with sample access management & individual rack location learning
- External communications package



| REVOLUTION 300 Series | 313-P | 315-P |
|----------------------------------|-----------|-----------|
| 1.2 and 2 ml Vials | 16,900 | 19,500 |
| Quantity of Large Racks | 12 | 12 |
| Quantity of Mini Racks | 4 | 4 |
| Number of Shelves Per Rack | 13 | 15 |
| Total LN2 Capacity Storage (L) | 54.3 | 67.0 |
| Total Inner Vessel Capacity (L) | 460.9 | 530.4 |
| Inside Diameter (in/mm) | 29.9/759 | 29.9/759 |
| Outside Diameter (in/mm) | 32/813 | 32/813 |
| Overall Height (in/mm) | 57.7/1465 | 57.7/1465 |
| Useable Height (in/mm) | 30.8/783 | 35.8/911 |
| Weight, Empty (lb/kg) | 462/209.6 | 490/222.3 |
| Weight, Full Without ICS (lb/kg) | 553/250.8 | 1175/533 |
| Neck Opening (in/mm) | 11.8/300 | 11.8/300 |



Solenoid-Based Locking Lid



Large, Intuitive Touch Screen

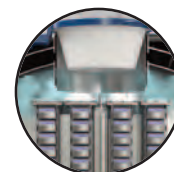


Leak-Free Manifold Plumbing



Defogging Fan & LED Light

OPTIONAL



Radiance Cooling Technology



Motor-Driven Sample Carousel



RFID Badge Reader



External Comms Package



Revolution 400 Series

Revolution Core Features

- Configurable text and email notifications / web access
- Limited battery backup, gas bypass
- Operation at -190C Vapor phase with extended hold
- 360° LED internal light
- Built in extraction fan to clear fog
- Dual, redundant level measurement system
- Coordinated and/or timed filling
- Hinged, auto-locking lid with access control
- Stabilized carousel with top and bottom bearings
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Revolution+

(All Core Features Plus Up to 4 Options)

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Solenoid-Based Locking Lid



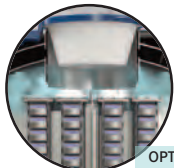
Large, Intuitive Touch Screen



Leak-Free Manifold Plumbing



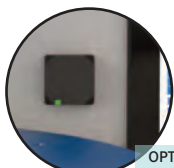
Defogging Fan & LED Light



Radiance Cooling Technology



Motor-Driven Sample Carousel



RFID Badge Reader



External Comms Package

| REVOLUTION 400 Series | 413-P | 414-P | 415-P | 413-R | 414-R | 415-R |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1.2 and 2 ml Vials | 36,400 | 39,200 | 42,000 | 39,000 | 42,000 | 45,000 |
| Quantity of Large Racks | 24 | 24 | 24 | 26 | 26 | 26 |
| Quantity of Mini Racks | 16 | 16 | 16 | 16 | 16 | 16 |
| Number of Shelves Per Rack | 13 | 14 | 15 | 13 | 14 | 15 |
| Total LN2 Capacity Storage (L) | 133 | 88 | 102 | 88 | 88 | 102 |
| Total Inner Vessel Capacity (L) | 978 | 978 | 1139 | 978 | 978 | 1139 |
| Inside Diameter (in/mm) | 39.8/1012 | 39.8/1012 | 39.8/1012 | 39.8/1012 | 39.8/1012 | 39.8/1012 |
| Outside Diameter (in/mm) | 42/1068 | 42/1068 | 42/1068 | 42/1068 | 42/1068 | 42/1068 |
| Overall Height (in/mm) | 55.8/1419 | 55.8/1419 | 61.9/1574 | 55.8/1419 | 55.8/1419 | 61.9/1574 |
| Useable Height (in/mm) | 30/762 | 32.4/883 | 34.8/883 | 32.4/883 | 32.4/883 | 34.8/883 |
| Weight, Empty (lb/kg) | 677/307 | 677/307 | 737/334.5 | 677/307 | 677/307 | 737/334.5 |
| Weight, Full Without ICS (lb/kg) | 858/389.1 | 858/389.1 | 918/416.6 | 858/389.1 | 858/389.1 | 918/416.6 |
| Neck Opening (in/mm) | 16.7/426 | 16.7/426 | 16.7/426 | 16.7/426 | 16.7/426 | 16.7/426 |

Revolution 600 Series

Revolution Core Features

- Configurable text and email notifications / web access
- Limited battery backup, gas bypass
- Operation at -190C Vapor phase with extended hold
- 360° LED internal light
- Built in extraction fan to clear fog
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- Coordinated and/or timed filling
- Hinged, auto-locking lid with access control
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Revolution+

(All Core Features Plus Up to 4 Options)

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- External communications package





Solenoid-Based Locking Lid



Large, Intuitive Touch Screen



Leak-Free Manifold Plumbing



Defogging Fan & LED Light



Radiance Cooling Technology



Motor-Driven Sample Carousel



RFID Badge Reader



External Comms Package

| REVOLUTION 600 Series | 613-P | 614-P | 615-P | 613-R | 614-R | 615-R |
|----------------------------------|------------|------------|------------|------------|------------|------------|
| 1.2 and 2 ml Vials | 85,475 | 92,050 | 98,625 | 83,200 | 89,600 | 96,000 |
| Quantity of Large Racks | 54 | 56 | 56 | 60 | 60 | 60 |
| Quantity of Mini Racks | 39 | 39 | 39 | 16 | 16 | 16 |
| Number of Shelves Per Rack | 13 | 14 | 15 | 13 | 1 | 15 |
| Total LN2 Capacity Storage (L) | 225 | 201 | 319 | 225 | 201 | 319 |
| Total Inner Vessel Capacity (L) | 1667 | 1667 | 1900 | 1667 | 1667 | 1900 |
| Inside Diameter (in/mm) | 57.9/1470 | 57.9/1470 | 57.9/1470 | 57.9/1470 | 57.9/1470 | 57.9/1470 |
| Outside Diameter (in/mm) | 60/1524 | 60/1524 | 60/1524 | 60/1524 | 60/1524 | 60/1524 |
| Overall Height (in/mm) | 57.8/1469 | 57.8/1469 | 63.9/1625 | 57.8/1469 | 57.8/1469 | 63.9/1625 |
| Useable Height (in/mm) | 31.1/789.9 | 34.7/883.1 | 35.6/904.2 | 31.1/789.9 | 34.7/883.1 | 35.6/904.2 |
| Weight, Empty (lb/kg) | 1271/576.6 | 1358/615.9 | 1358/615.9 | 1271/576.6 | 1358/615.9 | 1358/615.9 |
| Weight, Full Without ICS (lb/kg) | 1754/795.6 | 1841/834.9 | 1841/834.9 | 1754/795.6 | 1841/834.9 | 1841/834.9 |
| Neck Opening (in/mm) | 24.5/622 | 24.5/622 | 24.5/622 | 24.5/622 | 24.5/622 | 24.5/622 |