# DS2 Specifications

## About DYNEX Technologies

DYNEX is a worldwide manufacturer of microplate instrumentation, seamlessly integrating advanced detection with fully-automated sample handling, consumables and accessories. The DYNEX systems have a proven track record of high-quality products, excellent service and support.

## Ordering Information

| Product # | Instrument/Components |
|---|---|
| 62000 | DS2 System |
| 62010 | DS2 System with barcode scanner |
| 62700 | Barcode scanner |

| Product # | Consumables |
|---|---|
| 62910 | Deep-well strips (250/box) |
| 65950 | Reagent tubes, 25 mL (24/pack) |
| 62930 | Reagent tubes, 15 mL (10/pack) |
| 65920 | Reagent tips (432/box) |
| 65910 | Sample tips (432/box) |
| 65940 | Control vials with caps (33/pack) |

## Physical Specifications

| Dimensions | Metric | Non Metric |
|---|---|---|
| Width: | 54 cm | 21 in |
| Depth: | 68 cm | 27 in |
| Height: | 66 cm | 26 in |
| Footprint: | 0.36 sq m | 3.9 sq ft |
| Bench Weight: | 48 kg | 105 lbs |
| Ship Weight: | 78 kg | 170 lbs |
| Noise: | Noise output < 78 dB | |

## Power Supply Requirements

| | |
|---|---|
| Voltage: | 100 – 240 V automatic conversion |
| Frequency: | 50/60 Hz |
| Power Consumption: | < 300 VA |

## System Specifications

| | |
|---|---|
| Number of Plates: | 2 |
| Sample Capacity: | 100 per load |
| Continuous Sample Loading: | Yes |
| Sample Tube Size: | 10 mm – 16 mm diameter
40 mm – 100 mm height |
| Number of Reagents: | Up to 8 (25 mL tubes)
Up to 10 (15 mL tubes) |
| Number of Standard/Control Bottles: | 24 (2 mL vials) |
| Assays per Plate: | Up to 12 |
| Dilution Wells Capacity: | Up to 96 deep-well strips (12 x 8) |
| Sample Tip Capacity: | 216 tips (2 x 108) |
| Reagent Tip Capacity: | 20 tips |

## Reader Specifications

| | |
|---|---|
| Photometric Range: | 0.100 – 3.0 OD |
| Spectral Range: | 405 nm – 690 nm |
| Filter Slots: | 6 wavelength |
| Precision: | < 1% CV (< 2.0 OD)
< 2% CV (2.0 – 3.0 OD) |
| Accuracy: | ± 0.005 OD or 2.5%
(0.000 – 3.000 OD) whichever is greater |
| Read Time: | < 30 sec (single wavelength) |

## Washer Specifications

| | |
|---|---|
| Manifold Configuration: | 8-way |
| Programmable Volumes: | 50 µL – 1,000 µL |
| Wash Buffer Capacity: | 2 wash bottles at 2 L, with level-sensing |
| Residual Wash Volume: | < 3 µL with super sweep |
| Dispense Precision: | ≤ 5% CV (with 300 µL in a 96 well plate) |
| Waste Container: | 1 x 1.5 L |

## Incubator Specifications

| | |
|---|---|
| Number of Incubators: | 2 |
| Temperature Range: | Ambient + 4° C to 40° C |
| Temperature Accuracy: | ± 1° C across plate @ 37° C |
| Shaking: | Independent linear motion
14 – 20 Hz (periodic or continuous) |
| Temperature Monitoring: | Yes |

## Reagent Pipetting Specifications

| | |
|---|---|
| Reagent Tip Size: | 1,300 µL |
| Reagent Pipetting Volume: | 20 µL – 1,000 µL |
| Precision, Reagent Tip: | < 3% CV at any operating volume above 20 uL (single-shot mode) |

## Sample Pipetting Specifications

| | |
|---|---|
| Sample Tip Size: | 300 µL |
| Sample Pipetting Volume: | 10 µL – 250 µL |
| Sample Pipetting Precision: | < 3% CV at any operating volume above 10 uL (single-shot mode) |
| Dilution Range: | 1 part in 199 one-stage dilution
1 part in 39,601 two-stage dilution |

## Process Security

| | |
|---|---|
| Liquid Level Sensing: | Yes (reagents, controls and samples) |
| Level Sensor System: | Pressure differential |
| Clot Detection: | Yes |
| Dispense Anomaly Detection: | Yes |
| Tip Detection: | Yes |
| Electronic Signature Pipetting: | Yes |
| Alarms: | Yes |

## Software

| | |
|---|---|
| Controlling Software: | DS-Matrix® |
| Work Protocols (Assays): | Unlimited |
| Data Processing: | Quantitative and qualitative |
| Levey-Jennings: | Yes |
| Westgard Rules: | Yes |
| Process Reporting: | Event log + error log |
| Automatic Error Recovery: | Yes |
| Password Access Control: | Yes |

Attributes and specifications subject to change without notice.