



# DSX 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
65100	DSX Ambient System (no incubators)
65200	DSX System with 2 incubators
65400	DSX System with 4 incubators
65600	Incubator module
65700	Sample ID barcode scanner module

  

Product #	Consumables
65930	Deep-well microplate, 1 mL
62910	Deep-well strips (250/box)
65950	Reagent tubes, 25 mL (24/pack)
65920	Reagent tips (432/box)
65910	Sample tips (432/box)
65940	Control vials with caps (33/pack)



**DYNEX Technologies**  
Corporate Headquarters  
14340 Sullyfield Circle  
Chantilly, VA 20151-1621 USA  
703.631.7800 Phone  
703.803.1441 Fax  
800.288.2354 U.S. Toll-free  
customerservice@dynex.com



**DYNEX Technologies Ltd.**  
Worthing, UK  
adminuk@dynex.com

**DYNEX Technologies GmbH**  
Denkendorf, Germany  
dynexgermany@dynex.com

**DYNEX Technologies, Inc.**  
Hong Kong  
dynex-asia@dynex.com

## Physical Specifications

Dimensions	Metric	Non Metric
Width:	106 cm	42 in
Depth:	91 cm	36 in
Height:	80 cm	32 in
Footprint:	0.98 sq m	10.5 sq ft
Bench Weight:	136 kg (max.)	300 lbs (max.)
Ship Weight:	244 kg (max.)	537 lbs (max.)

## Power Supply Requirements

Voltage:	100 – 240 V automatic conversion
Frequency:	50/60 Hz
Power Consumption:	< 800 VA (online UPS recommended)

## System Specifications

Number of Plates:	4
Sample Capacity:	96 (98 positions available)
Continuous Sample Loading:	Yes
Sample Tube Size:	10 mm – 16 mm diameter 40 mm – 100 mm height
Number of Reagents:	Up to 24 (25 mL tubes)
Number of Standard/Control Bottles:	33 (1.5 mL vials)
Assays per Plate:	1 assay per strip or up to 12 assays per plate
Dilution Wells Capacity:	Up to 192 deep-well strips (24 x 8)
Sample Tip Capacity:	432 (4 x 108)
Reagent Tip Capacity:	41 tips

## Reader Specifications

Photometric Range:	0.000 – 3.000 OD
Spectral Range:	405 nm – 690 nm
Filter Slots:	6 wavelength
Precision:	± 0.010 OD at 0.000 – 0.500 OD < 1% CV at 0.501 – 2.000 OD < 1.5% at 2.001 – 2.500 OD
Accuracy:	± 0.01 OD or 2.5% (0.000 – 3.000 OD) whichever is greater
Read Time:	< 10 seconds, single wavelength < 20 seconds, dual wavelength

## Washer Specifications

Manifold Configuration:	8-way
Programmable Volumes:	50 µL – 999 µL
Wash Buffer Capacity:	4 wash bottles at 2.0 L, with level-sensing
Residual Wash Volume:	< 3 µL per well with dual-axis sweep in a flat-bottom plate
Dispense Precision:	≤ 5% CV (with 300 µL in a 96 well plate)
Waste Container:	8 L with waste full sensor

## Incubator Specifications

Number of Incubators:	Up to 4
Temperature Range:	RT + 7° C to 50° C (elevated incubator) RT + 5° C (ambient incubator)
Temperature Accuracy:	± 1° C
Shaking:	> 15 Hz periodic or continuous
Temperature Monitoring:	Yes

## Reagent Pipetting Specifications

Reagent Tip Size:	1,300 µL
Reagent Pipetting Volume:	25 µL – 1,000 µL
Reagent Pipetting Precision:	≤ 3% CV at 10 shots at any volume in operating range above 50 µL
Reagent Pipetting Accuracy:	± 2% of target volume at 50 µL or greater in operating range (single-shot mode)

## Sample Pipetting Specifications

Sample Tip Size:	300 µL
Sample Pipetting Volume:	10 µL – 250 µL single-shot 25 µL – 100 µL multi-shot
Sample Pipetting Precision:	≤ 3% CV at any operating volume above 10 µL (single-shot mode)
Sample Pipetting Accuracy:	± 2% of target volume at any operating volume above 10 µL (single-shot mode)
Estimated Cycle Time for Sample Pickup to Delivery on Plate:	< 8 seconds^
Time to Dispense:	19 minutes (typical)^ 50 µL of 96 samples to plate from sample tubes or deep-well plates
Sampling Time w/Dilutions:	< 26 minutes (typical)^
Dilution Range:	1 part in 190 one-stage dilution 1 part in 36,100 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:	REVELATION DSX®
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.



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PN: 95000340, Rev A

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