



# DSX<sup>®</sup>

ELISA SYSTEM



# DYNEX® Technologies

We are a powerhouse in automated sample processing and clinical diagnostic testing, bringing over seven decades of innovation and dependability to the global diagnostic industry. Quality is the cornerstone of our business, reflected in our family of U.S. manufactured, ISO certified instruments.

Powerful and precise, DYNEX's portfolio of diagnostic instruments highlight efficiency and effective time management through our automated assay testing platforms. Our instruments offer scalable testing solutions customized to outfit your unique laboratory.

Designed to protect your investment, our accessories and consumables support peak performance of both instruments and test results, every time.

## The DYNEX® DSX® system sets the standard for comprehensive and reliable automation.



### Our Automation. Your Results.

The DYNEX® DSX® system provides extraordinary flexibility in your ELISA workflow. Our automated open system handles various assays and volumes simultaneously, with the speed and accuracy your laboratory requires. Advanced automation features at every stage of the workflow provides the walk away productivity your lab demands.

## Maximize Productivity

- ✓ Assay flexibility with proficient multi-assay management of up to 96 samples on-board and 4-plate incubator
- ✓ Small Benchtop footprint accommodates limited spaces while increasing your ELISA testing capacity
- ✓ Minimize learning curve for laboratory personnel with an intuitive, graphic user interface
- ✓ DYNEX® LIS connectivity and integration

## Deliver Results

- ✓ Program parameters to satisfy clinicians' preferred reporting format
- ✓ Run the assays your laboratory is accustomed to and clinicians prefer
- ✓ Customize testing to accommodate clinicians' specific assay requirements
- ✓ Quality results with real-time alerts of gross-pipetting errors and quick processing time
- ✓ Reduce human errors with automated testing



The DYNEX® DSX® open system is a critical component for today's fast-paced laboratory requiring increased assay flexibility to meet heightened clinician demand for timely and reliable results.

**For more information on how we can help you achieve optimal laboratory proficiency, contact your local DYNEX business partner.**



## 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

Attributes and specifications subject to change without notice.

## 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)
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
Sample Pipetting Accuracy:	± 2% of target volume at any operating
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

## 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 #	Accessories / Consumables
65910	Sample Tips (432/box)
65920	Reagent Tips (432/box)
62910	Deep-Well Strips (250/box)
65930	Deep-Well Microplate, 1 mL
65950	Reagent Tubes, 25 mL (24/pack)
65940	Control Vials with Caps (33/pack)

Contact our Global Customer Service team to place your order today.

U.S. Toll Free: 800.288.2354 – Ext. 3  
Fax: +1.703.803.1441  
Email: [customerservice@dynex.com](mailto:customerservice@dynex.com)

### CORPORATE HEADQUARTERS

**DYNEX Technologies, Inc.**  
14340 Sullyfield Circle  
Chantilly, VA 20151  
Tel: +1.703.631.7800  
[dynextechnologies.com](mailto:dynextechnologies.com)

### GLOBAL LOCATIONS

**DYNEX Technologies, GmbH – Germany**  
Email: [dynexgermany@dynex.com](mailto:dynexgermany@dynex.com)

**DYNEX Technologies, Ltd. – China**  
Email: [dynex-asia@dynex.com](mailto:dynex-asia@dynex.com)

### For questions related to service appointments or DYNEX instruments:

**Global Technical Services**  
U.S. Toll Free: 800.288.2354 – Ext. 4  
Fax: +1.703.803.1441  
Global: +1.703.631.7800  
Email: [techservice@dynex.com](mailto:techservice@dynex.com)

### For questions related to new or existing orders:

**Global Customer Service**  
U.S. Toll Free: 800.288.2354 – Ext. 3  
Fax: +1.703.803.1441  
Email: [customerservice@dynex.com](mailto:customerservice@dynex.com)

Refer to User Manual for full explanation of instrument operations and maintenance.

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