



DYNEX® DSX®

SYSTEM TECHNICAL SPECIFICATIONS

The DYNEX® DSX® offers extraordinary flexibility in your ELISA workflow. Our automated open system handles various assays and volumes simultaneously, with the speed and accuracy your laboratory relies on.

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.

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

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