DYNEX TECHNOLOGIES

DSX® Technical Specifications

Physical Specifications

Dimensions	Metric	Non-Metric
Width	991 mm	39 in
Depth	787 mm	31 in
Height	819 mm	32.25 in
Footprint	0.98 sq m	10.5 sq ft
Bench Weight	122 kg (max)	270 lbs (max)
Ship Weight	244 kg (max)	537 lbs (max)
Noise Output	< 70 dB	

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	98
Continuous Sample Loading	Yes
Sample Tube Size	10 – 16 mm diameter / 40 – 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	Up to 12
Dilution Wells Capacity	Up to 192 deep-well strips (24 x 8)
Sample Tip Capacity	432 tips (4 x 108)
Reagent Tip Capacity	41 tips

Reader Specifications

Photometric Range	0.000 – 3.500 OD
Spectral Range	405 – 690 nm
Filter Slots	6 wavelength
Precision	± 0.01 OD at 0.000 – 0.500 OD < 1% CV (< 2.0 OD) < 1.5% CV (2.0 – 2.5 OD)
Accuracy	± 0.01 OD or 2.5% (0.000 – 3.000 OD) whichever is greater
Read Time	< 10 sec (single wavelength) < 20 sec (dual wavelength)

Washer Specifications

Manifold Configuration	8-channel wash head
Programmable Volumes	50 – 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 Capacity	8 L with waste full sensor

Incubator Specifications

Number of Incubators	Up to 4
Temperature Range	RT + 7° – 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	20 – 1,000 µL
Reagent Pipetting Precision	≤ 3% CV at 10 shots at any operating volume above 50 µL
Reagent Pipetting Accuracy	± 2% of target volume at 50 µL or greater operating volume (single-shot mode)

Sample Pipetting Specifications

Sample Tip Size	300 µL
Sample Pipetting Volume	10 – 300 µL
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
Estimated Cycle Time for Sample Pickup to Delivery on Plate	< 8 sec
Time to Dispense	19 minutes (typical) 50 µL of 96 samples to plate from sample tubes or deep-well plates
Sampling Time with 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	DSX® Revelation
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.

Have questions? Contact us today!

CORPORATE HEADQUARTERS

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

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