

DS2[®] Elite Technical Specifications



Physical Specifications

Dimensions	Metric	Non-Metric
Width	533 mm	21 in
Depth	699 mm	27.5 in
Height	667 mm	26.25 in
Footprint	0.36 sq m	3.9 sq ft
Bench Weight	54 kg	120 lbs
Ship Weight	78 kg	170 lbs
Noise Output	< 78 dB	

Power Supply Requirements

Voltage	100 – 240 V automatic conversion
Frequency	50/60 Hz
Power Consumption	≤ 360 VA

System Specifications

Number of Plates	2
Sample Capacity	100 per load
Continuous Sample Loading	Yes
Sample Tube Size	10 – 16 mm diameter / 40 – 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	0.000 – 3.500 OD
Spectral Range	405 – 690 nm
Filter Slots	6 wavelength
Precision	< 1% CV (< 2.0 OD) < 2% CV (2.0 – 3.0 OD)
Accuracy	± 0.01 OD or 2.5% (0.000 – 3.000 OD) whichever is greater
Read Time	< 30 sec (single wavelength)

Washer Specifications

Manifold Configuration	8-channel wash head
Programmable Volumes	50 – 1,000 µL
Wash Buffer Capacity	2 wash bottles at 2.0 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 Capacity	1 x 1.5 L

Incubator Specifications

Number of Incubators	2
Temperature Range	Ambient + 4° – 40°C
Temperature Accuracy	± 1°C across plate at 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 – 1,000 µL
Reagent Pipetting Precision	< 3% CV at any operating volume above 20 µL (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)
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.

Have questions? Contact us today!

CORPORATE HEADQUARTERS

DYNEX Technologies, Inc.
14340 Sullyfield Circle
Chantilly, VA 20151
dynex.com

GLOBAL CUSTOMER SERVICE

U.S. Toll Free: 800.288.2354 – Ext. 3
Phone: +1.703.631.7800
Fax: +1.703.803.1441
Email: customerservice@dynex.com

GLOBAL TECHNICAL SERVICE

U.S. Toll Free: 800.288.2354 – Ext. 4
Phone: +1.703.631.7800
Fax: +1.703.803.1441
Email: techservice@dynex.com

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

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