

DSX® Specifications

Physical Specifications

Dimensions

Width:	<1060 mm	42 in
Depth:	<910 mm	36 in
Height:	<800 mm	32 in
Footprint:	<1060 x 610 mm	42 x 24 in
Bench weight:	136 kg (max)	300 lbs (max)
Ship weight:	244 kg (max)	537 lbs (max)

Power Supply

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

Reader Specifications

Photometric range:	0.000 to 3.000 OD
Spectral range:	405 nm to 690 nm
Precision:	±0.010 OD at 0.000 to 0.500 OD <1% CV at 0.501 to 2.000 OD <1.5% at 2.001 to 2.500 OD
Accuracy:	±0.01 OD or 2.5% (0.000 to 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 – 999 µL
Wash containers:	4 wash bottles at 2.0 L, with level-sensing
Waste container:	8 L with waste full sensor
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)

Incubator Specifications

Number of incubators:	Up to 4
Temperature range:	RT + 7° C to 50° C
Temperature accuracy:	± 1° C
Shaking:	>15 Hz periodic or continuous

Pipetting Specifications

Number of plates:	4
Number of assays:	1 assay per strip or up to 12 assays per plate
Number of sample tubes:	96
Number of reagents:	24
Number of standard/control bottles:	33
Number of pipettes:	1

Reagent Pipetting

Reagent tip size:	1300 µl
Number of reagent tips:	41
Reagent pipetting volume:	25 – 1000 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)

Ordering Information

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

Consumables

65930	1mL Deep Well Microplate
62910	Deep-well strips (250/box)
62920	Reagent tubes, 25 mL (10/pack)
65950	Reagent tubes, 25 mL (24/Pack)
65920	Reagent tips (432/box)
65910	Sample tips (432/box)
65940	Control vials w/caps (33/pack)

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
Well-fill verification:	Yes
Alarms:	Yes

Sample Pipetting

Sample tip size:	300 µl
Sample pipetting volume:	10 – 250 µl 10 – 250 µl single-shot 25 – 100 µl multi-shot
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: Example:	<26 minutes (typical)^ 2 stage dilution, 20 µl sample to 400 µl buffer in <26 minutes
Single-shot sample pipetting precision:	≤3% CV at any operating volume above 10 µl
Single-shot sample pipetting accuracy:	±2% of target volume at any operating volume above 10 µl
Dilution range:	1 part in 190 one-stage dilution, 1 part in 36,100 two-stage dilution
Number of sample tips loaded:	4 racks of 108
Sample tube dimensions:	Sample Rack Options Short: 40-75 mm Tubes Long: 75-100 mm Tubes



OEM capability for assay development



IEC/EN 61010-1:2001
IEC/EN 61010-2-010:2003
IEC/EN 61010-2-081:2002
IEC/EN 61010-2-101:2002
UL 61010-1:2001
CSA C22.2 No. 61010-1
EMC: IEC 61326-1:2005(EN 61326-1:2006)
IEC61326-2-6:2005(EN61326-2-6:2006)



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Specifications are subject to change without notice.

Measured reading time is an average depending upon run conditions.

^ Typical pipetting time is an average. For any given system, the result may vary, either shorter or longer than 15 minutes.

* Factory calibration of the pipette module are carried out using a calibration fluid.

DSX is a general purpose microplate processor. It is the customer's sole responsibility to determine the DSX system's suitability for a particular application, including any clinical application, and validate the product for that use in compliance with all applicable legal requirements and policies.

Dynex makes no representations, warranties, or performance claims with respect to the performance of DSX for any specific application, including clinical application, or for the use of the DSX system with any reagents, assays, or other products.

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