### DS2 Specifications

#### Physical Dimensions
- **Overview:** 23 cm x 24 cm
- **Depth:** 60 cm
- **Height:** 60 cm
- **Weight:** 58 kg / 128 lb

#### Power Supply
- **Voltage:** 200 – 240V, 50/60 Hz
- **Frequency:** 50/60 Hz
- **Consumption:** 1.8 A

#### General Specifications
- **Number of Plates:**
  - 96: 1 per load
  - 384: 4 per load
- **Sample capacity:**
  - 96: 100 samples
  - 384: 400 samples
- **Reagent-tip range:** 1,300 µl (20 – 1,000 µl)
- **Sample-tip range:** 300 µl (10 – 250 µl)
- **Tip Type:** Disposable tips (2 types)

#### Pipetting Specifications
- **Temperature monitoring:**
  - Accuracy: ±0.1°C
  - Uniformity: ±0.5°C across plate
- **Temperature control:**
  - Method: External water jacket
  - Range: 15°C to 35°C
  - Resolution: 0.1°C

#### Washing Specifications
- **Maximum wash cycles:** 9
- **Water consumption:** 2.7 L
- **Dispense pressure:** 0 to 50 psi
- **Dispense range:** 50 – 999 µl

#### Water-Container Specifications
- **Dimensions:** 400 x 400 x 300 mm
- **Weight:** 20 kg

#### Control-fluid Capacity
- **Dimensions:** 100 x 100 x 100 mm
- **Weight:** 10 kg

#### Assay Capacity
- **Dimensions:** 96 x 96 x 96 mm
- **Weight:** 50 kg

#### Reader Specifications
- **Dimensions:** 400 x 400 x 300 mm
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The DS2 makes automation easy

Designed with full walk-away capability, the DS2 readily processes two 96-well microplates and up to 12 different assays simultaneously and features the most user-friendly control system available, chain of custody, and instrument diagnostics. The DS2-driven sample-to-result automation of microplate assays:

- Sample dilution and distribution
- Incubation, washing, and reagent dispensing
- Reading with automatic data reduction and quality control
- Automatic bar-code scanning

An open system, the DS2 is ideal for virtually any ELISA application – from clinical diagnostics, such as auto-immune and infectious diseases – to food safety and drug-of-abuse testing. Most important, the DS2 has all you need to ensure the rigors, repeatability, and accuracy required to deliver consistent, best-quality results.

Ingenious hardware design

Dyes designed the DS2 for efficiency and reliability. The simplified system has few moving parts – one multi-function robot arm does everything from dispensing to operating the bar-code reader. In addition, the DS2’s vertical design and patent-pending multi-carrier sample space, enabling a minimal footprint, with maximum consumable storage:

- 216 sample tips
- 96 dilution vessels in convenient 8-way strips
- 20 reagent tips
- 6 large & 10 medium reagent bottles
- 24 standard/control bottles

Powerful data-reduction options

- Sigmoid, polygon fit
- Linear, quadratic, cubic, and quartic-regression fits
- Cubic-spline, sigmoid, akima, and loglogit fits
- Automatic quality-control equations
- Levey-Jennings charts with Westgard rules
- Thresholding for qualitative assays
- Ratio equations for complex calculations

Worry-free system ensures accurate results

The DS2 prompts you if action is required, for example, if you need to add more reagents or wash fluids. You can set up the DS2 to deliver an audible alarm, and/or send you an e-mail outlining the problem. Integrated self-diagnostics make troubleshooting easy. You can even send Dynex technical support a problem description from within the application, with the system information automatically attached.

Intuitive, easy-to-use DS-Matrix™ software for DS2

Dynex invested three years and millions of dollars to develop DS-Matrix™ software for DS2. Feature-rich and groundbreaking in its process simulation and ease of use, DS-Matrix allows you to rapidly integrate automation in the lab with confidence. The simple, graphical interface means that any lab technician can use the DS2 with minimal training.

Dynex support is just an e-mail or phone call away: techservice@dynextechnologies.com; +1.800.288.2354, or +1.703.631.7800, press option 3.

Patent-pending ESP provides in-process verification of critical fluid and sample transfers.

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