

# AIA<sup>®</sup>-1800

Automated Immunoassay Analyzer



TOSOH



TOSOH Bioscience, Inc.

# AIA<sup>®</sup>-1800

Automated Immunoassay Analyzer

**Fast**

**Flexible**

**Feature Rich**

## **Fast**

Perform 180 tests per hour running any combination of AIA<sup>®</sup> ST assays. The AIA<sup>®</sup>-1800 maximizes throughput by using random access and continuous process without workflow interruptions.

## **Flexible**

Customize the automatic reschedule, automatic rerun, and automatic reflex testing by specimen and analyte for true result review by exception. The AIA<sup>®</sup>-1800 allows you to meet your laboratory workload requirements - Run any test, in any combination, in any order at any time.

## **Feature Rich**

Enhance efficiency, improve workflow, and increase your laboratory marketability with these essential components:

- Fully automated daily maintenance and record keeping
- Automatic inventory management of reagents and supplies
- Sample level sensing
- Sample clot detection
- True auto dilution from 2 to 625
- Automated pretreatment
- Workload statistics

## Tip/Reagent Compartment

- Load up to 288 conductive pipette tips and up to 18 different bar-coded secondary reagents.
- Continuous processing allows tips and reagents to be added as needed without interrupting work in progress.
- Inventory management of all on board reagents and supplies is automatic and continuous.
- Simple icons and color codes allows the operator to see at a glance when reagents or supplies need to be replenished.



# SYSTEM FEATURES

## Windows® Interface

- The AIA®-1800 operator interface is menu and icon driven.
- The AIA®-1800 is an approachable system with intuitive operation.
- Assay and rack monitoring screens are highly visual allowing the operator to check specimen progress and assay performance at a glance.



## Sample Rack Loader

- Up to 17 bar-coded sample racks can be loaded with any combination of 170 bar-coded primary tubes and sample cups.
- New specimens can be added at any time without processing interruptions.
- High priority testing is performed using a single, dedicated STAT position.
- STAT specimens are color coded on the assay monitor screen for immediate recognition.

## Sorter

- Maximize walk away time by loading up to 620 tests in 31 bar-coded test cup trays.
- Throughout the day, as workflow changes, customize your test mix; add what you need, when you need it without process interruptions.
- Tosoh's proven, unitized test cups require no onboard refrigeration.



*Actual Test Cup size is approximately 2cm x 1cm.*

## **Tosoh's AIA<sup>®</sup> Reagent Test Cup Technology**

- Produce accurate and consistent results with unit dose test cups requiring no on-board refrigeration, no pre-mixing, and no pre-measuring.
- Realize time and cost savings by eliminating preparation errors and waste.
- Standardize your inventory management with a complete test menu available across all AIA<sup>®</sup> platforms.



### Main Specifications

Assay principal	Fluorometric enzyme immunoassay (IEMA / EIA)
Processing method	Automated continuous random access
Processing capacity	Max. 180 tests/hr. (ST reagents)
Sample volumes	10 to 125 µl
Sample clot detection	Pressure detection
Specimen dilution factors	Dilution range 2 to 625 µl
Specimen pretreatment	Automatic pretreatment (10 min. at 37°C)
Quality control	Levey-Jennings charts, Selectable QC Rules

### Reagent Sorter

Reagent capacity	Max. 31 trays (equivalent to 31 analytes and 620 tests) Continuous loading
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### Sample Loader

Specimen capacity	ST model: 170 specimens, (continuous loading) LA model: 90 specimens, (continuous loading)
Sample containers	Test tubes (13X75, 13x100, 16x75, 16x100) Dedicated sample cups
Specimen barcodes	CODE39, CODE128, ITF, NW-7 compatible

### Tip/Reagent Loader

Dedicated tips	
Tip capacity	288 (96/rack, in 3 racks)
2nd Reagent capacity	Max of 18 different types Continuous loading

### External Input/Output

RS-232C	Controller PC, LIS and Beltline (LA Model)
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### Power Supply/Power Consumption

100 - 240 VAC, 50/60 Hz, 500 VA (excluding controller PC and printer)

### External Dimensions/Weight (excluding controller PC and monitor)

1800ST	65 (W) x 37 (D) x 49 (H) inches / 660 lbs
1800LA	65 (W) x 43 (D) x 49 (H) inches / 660 lbs

### Operating Environment

Temperature	15 C to 30 C
Humidity	40% to 80% (with no condensation)

### Conformance Status

EMC standard	IEC60601-1-2: 1993
CISPR class and group categories	Class A, Group 1
FCC	Part 15, Sub Part B, Class A



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