AIA-2000
FULLY AUTOMATED ENZYME IMMUNOASSAY ANALYZER

Advanced Immunoassay Testing

TOSOH BIOSCIENCE
Soar Through Your Immunoassay Testing Challenges

Throughput of 200 results per hour

Load up to 960 tests (48 trays)

Automatic inventory management of reagents and supplies

Additional substrate bottle prevents depletion

Automated daily maintenance and record keeping

Random access and continuous loading

Dual sampling arms

User defined programming

True auto dilution from 2 to 1000

Unit Dose Test Cup reagent system
AIA-2000 Operation: Simple and Intuitive

- Touch screen monitor allows easy instrument operation.
- Simple icons and color codes guide the operator.
- User friendly software runs on Windows Vista platform.
- Automated daily maintenance.
- Automated pre-treatment.
- Automated dilution.
- Reflex testing.
- Customizable pop-up reminders for reagent inventory and calibration curve stability.

Freedom to Walk Away

- 960 test cups give a walk away time of approx. 5 hours.
- 576 tips give a walk away time of approx. 3 hours.
- 2 substrate bottles give a walk away time of approx. 4 hours.
- 16 positions for secondary reagents.
- 20 sample racks (200 specimens) can be loaded at one time.
- Ask about Line Automation Model.

960 Test Cups
Touch Screen Monitor
Secondary Reagents
576 Pipette Tips
200 Sample Loader
4 Wash Probes
Throughput of 200 tests per hour.

First result in approx. 18 minutes.

Minimal maintenance: Daily maintenance takes approx 5 minutes.

Multiple robotic arms and 3 incubators, handle the various sample processing steps quicker to speed up overall sample processing.

Continuous processing allows specimens, tips and reagents to be added without interrupting work in progress.

Multiple STAT processing available.
Time Tested Reliable Reagents: Tosoh Unit Dose Test Cup

- Dry reagent format requires no pre-mixing, no pre-measuring, no on-board refrigeration and no waste.

- Calibration stability of up to 90 days for most assays.

- Reagents have one year shelf life from date of manufacture.

- Bar-coded for automated scheduling and inventory management.

- Extensive test menu includes thyroid, cardiac markers, tumor markers, reproductive hormones, anemia markers, and metabolic assays.

- Common to all Tosoh AIA Platforms

Report with Confidence

- Sophisticated calibration and control monitoring.

- Customizable flags.

- Graphical depiction of results.

- All AIA instruments provide consistent results between testing platforms.

- Tosoh’s technical team of experts ensures accurate result reporting.
**Main Specifications**

**Assay principal**  Fluorometric enzyme immunoassay (FEIA)

**Processing method**  Automated continuous random access

**Processing capacity**  Max. 200 tests/h. (ST reagents)

**In vitro diagnostic reagent**  AIA-PACK Series

**Sample volumes**  10 to 125 uL

**Sample clot detection**  Pressure detection

**Measuring conditions**  Reaction temperature: 37 degrees Celsius

**Antigen-antibody reaction time**  10 min., 20min. or 40 min. (depending on assay specification)

**Specimen dilution factors**  2 per assay specification selectable in the 2 to 1000 range

**Specimen pretreatment**  Automatic pretreatment (10 min. at 37 degrees Celsius)

**Detection method**  Fluorescent measurement (top-to-top system)

**Precision control**  Multirule (Levey-Jenning’s charts)

**Reagent Sorter**

Reagent set count  Max. 48 trays (equivalent to 48 analytes or 960 tests)

Can be added or changed at any time by key request

**Tip Sorter**

Tip  Dedicated tips

Tip set count  576 (96/rack, in 6 racks)

Can be added or changed at any time by key request

**Sample Loader**

Specimen set count  200 specimens, (add / change as required)

STAT: Using the Priority rack

Sample containers  Test tubes :13x75, 13x100, 16x75, 16x100 mm

(Diameter x Length)

Can be used in combination with dedicated sample cups

**Specimen barcodes**  CODE39, CODE128, ITF, NW-7, JAN compatible (compliant with ASTM14466-92 and CLA guideline compliant barcodes)

Min. element width: 0.191mm (0.254mm or over recommended)

**Reagent Carousel**

Reagent set count  Holds a max. of 16 reagent types

Can be added or changed at any time by key request

**External Input/Output**

RS-232C (ASTM) or Ethernet (HL7 V2.4)

**Power Supply/Power Consumption**

AC 100 - 240 V, 50/60 Hz

700 VA (excluding controller PC and printer (option))

Over voltage category II

**External Dimensions/Weight**

(AIA-2000 ST)  1500(W) x 907(D) x 1260(H) mm / 400 kg

59.1(W) x 35.7(D) x 49.6(H) inches / 881.8 lb

(AIA-2000 LA)  1500(W) x 1197(D) x 1260(H) mm / 400 kg

59.1(W) x 47.1(D) x 49.6(H) inches / 881.8 lb

**Operating Environment**

Temperature  15 to 30 degrees Celsius

Humidity  40% to 80% R.H. (with no condensation)

Pollution degree  2

Dust  Average office level

Altitude  Up to 2000 m

**Conformity Standard**

EMC standard  IEC61326-1: 2005 / EN61326-1: 2006,


CISPR class and group categories  Class A, Group 1

FCC  Part 15, Sub Part B, Class A

Barcode Reader  Class 1: IEC60825-1: 2001

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**Tosoh AIA Test Menu**

10 minute incubation unless otherwise noted.

**Tumor Markers**

- AFP
- CEA
- CA 125
- 27.29
- CA 19-9
- PSA

**Reproductive**

- β-HCG
- E2
- FSH
- LH II
- Prolactin
- Progesterone
- Testosterone

**Thyroid**

- TSH
- TT3
- T4
- FT3
- FT4
- T-Uptake
- TSH 3rd Gen*
- TPO Ab*
- Tg Ab*

**Cardiac Markers**

- CKMB
- Troponin I 2nd Gen
- Myoglobin

**Metabolic**

- Cortisol
- C-Peptide
- HGH
- Insulin
- iPTH

**Anemia**

- Ferritin
- Vitamin B12*
- Folate*

**Other**

- β-2 Microglobulin
- IgE II
- PAP

* Available in 40 minute format only

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Tosoh Bioscience, Inc.
6000 Shoreline Court, Suite 101
South San Francisco, CA 94080
Tel: (800) 248-6764
Fax: (650) 615-0415
www.tosohbioscience.us