

AIA-900

SPECIFICATIONS

Main Specifications	
Assay principle	Fluorometric enzyme immunoassay (FEIA)
Processing method	Automated continuous random access
Processing capacity	Max. 90 tests/h. (1 Step ST reagents)
Maximum available parameters	5 parameters / sample 9 parameters / sample with 9tray Sorter type 19 parameters / sample with 19tray Sorter type
Detection method	Fluorescent measurement (top-to-top system)
In vitro diagnostic reagent	AIA-PACK Series
Sample volumes	10 to 125 μL
Sampling	Using dedicated disposable conductive tip equipped with function of sample level detection
Sample clot detection	Pressure detection
Measuring conditions	Reaction temperature: 37 degrees Celsius Antigen-antibody reaction time: 10 min., 20 min. 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)

Analyzer Module	
Sample Loader	
Specimen set count	100 specimens, (Sample + AIA-PACK)
Sample containers	Test tubes :13 × 75, 13 × 100, 16 × 75, 16 × 100 mm (Diameter × Length) can be used in combination with dedicated sample cups
Specimen barcodes	CODE39, CODE128, ITF, NW-7, JAN/EAN/UPC, Industrial 2 of 5, COOP 2 of 5, can be mixed with non-barcoded samples
Handheld barcode reader	Option
Reagent cup identification	Reading parameter code and lot with CMOS Camera
Reagent / Tip Loader	
Reagent set count	Holds a max. of 14 reagent types can be added or changed at any time by key request
Substrate	
Placeable bottle	1 bottle

Operation Panel	
	8,4 inch Color LCD with Touch Panel
External Input/Output	
	RS-232C (ASTM, Bi-directional Communication)
Sorter Unit (Option)	
9tray Sorter unit	Load up to 9 parameters or 180 test cups
19tray Sorter unit	Load up to 19 parameters or 380 test cups can be added or changed at any time by key request

External Dimensions/Weight	
AIA-900	890 (W) × 665 (D) × 642 (H) mm / 122.5 kg
9tray Sorter type	1290 (W) × 665 (D) × 642 (H) mm / 163 kg
19tray Sorter type	1520 (W) × 665 (D) × 1247 (H) mm / 273 kg (Including Dedicated Stand)

Power Supply/Power Consumption	
	AC 100 - 240 V, 50/60 Hz, 300 VA

Operating Environment	
Temperature	15 to 30 degrees Celsius
Humidity	40 % to 80 % R.H. (with no condensation)
Altitude	Up to 2000 m

Conformity Standard	
EMC standard	IEC 61326-1: 2005 / EN 61326-1: 2006, IEC 61326-2-6: 2005 / EN 61326-2-6: 2006
Built-in barcode reader	IEC 62471: 2006

Product Numbers	
P/N	Description
0022930	Automated Enzyme Immunoassay Analyzer AIA-900
0022931	AIA-900 9tray Sorter
0022932	AIA-900 19tray Sorter* *AIA-900 Analyzer Stand and AIA-900 19tray Sorter Stand needed
0022933	AIA-900 Analyzer Stand
0022934	AIA-900 19tray Sorter Stand
0023066	AIA-900 9tray Sorter Stand

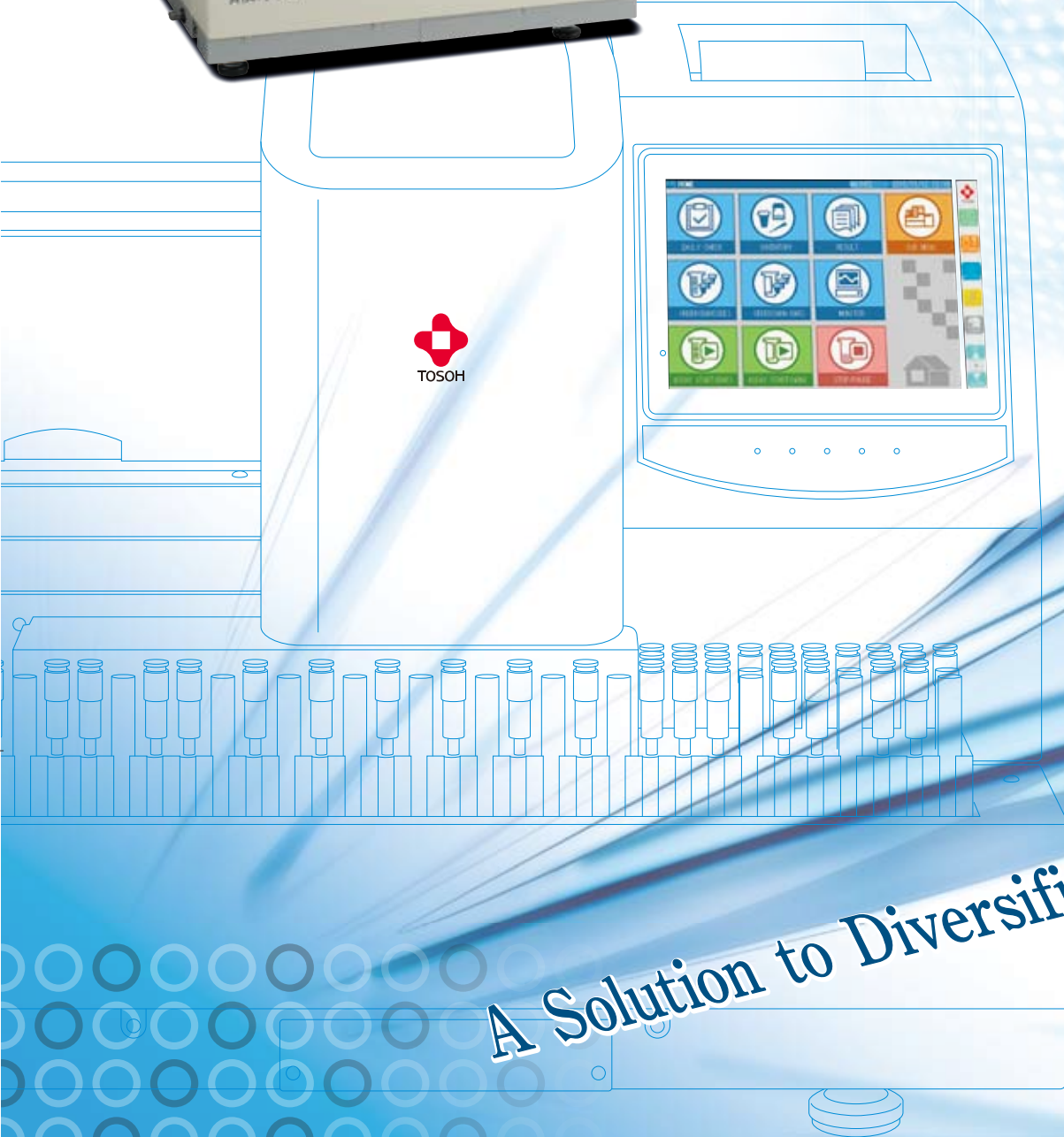


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AIA-900



A Solution to Diversified Needs

Flexibility

Stand alone type

Max. 5 parameters / sample,
100 positions (sample + AIA-PACK)



AUTOMATED ENZYME IMMUNOASSAY ANALYZER

AIA-900

9tray Sorter type

Max. 9 parameters / sample, Load up to 180 cups



19tray Sorter type

Max. 19 parameters / sample, Load up to 380 cups
(with dedicated analyzer stand and 19tray Sorter Stand)



Analyzer Stand

Dedicated sorter stand houses
Diluent tank, Washer tank,
Waste tank, and Waste box.

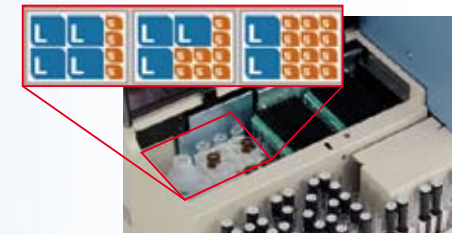


Reliability

- High sensitivity, high precision with noise-reduction fluorescence detection method.
- All-in-one cup reagent realizes minimum reagent loss.
- Multi-function sampling mechanism.
Conductive disposable pipette tip realize both detecting sample volume and clot detection.
- Equipped barcode reader and bar-coded samples allow accurate patient identification without manual worklist entry.

Efficiency

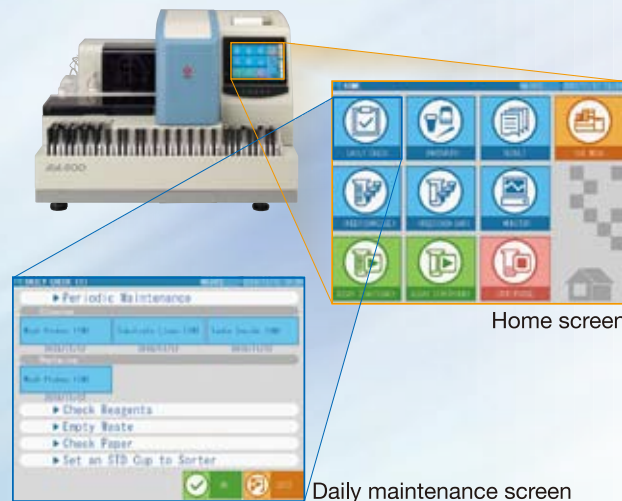
- Max. 90 tests / hour (1 Step ST reagents),
5 parameters / sample (Stand alone type).
- First result within 20 minutes.
- Automated sample dilution & pretreatment.
- Load up to 14 bottles of SAMPLE DILUTING SOLUTION, CONJUGATE and PRETREATMENT.
- Load up to 192 disposable pipette tips (96 tips × 2 racks).



Reagent rack

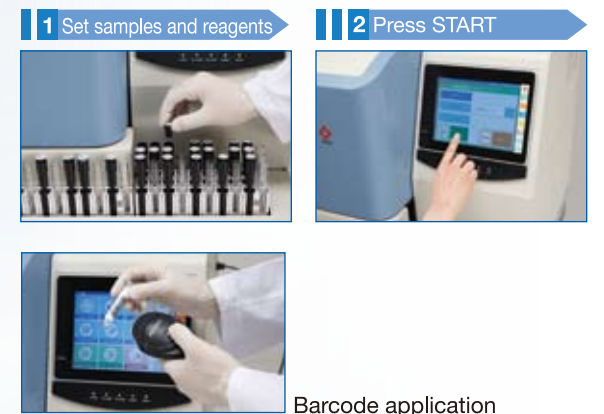
Easy to use

- Simple operation succeeded from AIA-600 II.
- User friendly, interactive touch screen.
- Automated daily maintenance.
- Bi-directional communication support QUERY mode analysis.
- Optional handheld barcode reader helps QUERY mode analysis and reduces calibration workload.



Home screen

Daily maintenance screen



1 Set samples and reagents

2 Press START

Barcode application

The AIA-PACK. A unique concept.

- Lyophilized reagents allow long AIA-PACK shelf-life
12 months from the date of manufacture.
90 days calibration stability.
- Most of the analytes require 10 minutes incubation time,
delivering the first result within 20 minutes.
- Low risk for contamination or carry-over between samples and reagents:
1 AIA-PACK = 1 test
The complete assay (incubation, wash and detection)
is carried out in the AIA-PACK cup.
- Disposable pipette tips for samples and reagents.
- The single cup per test combined with low volume consumption of reagents reflects Tosoh's environmental awareness.
- Extensive test menu provides a wide range of immunoassay tests including thyroid hormones, cardiac markers, tumor markers, reproductive hormones, and many more.

