

## EVOLIS System

Scalable Automation for Autoimmune and Infectious Serology Testing



# The Automated and Flexible Solution

The EVOLIS System delivers immunoassay microplate productivity to meet today's laboratory challenges

- Microplate automation for low to high volume testing to streamline workflow
- Automated microplate pipetting, incubation, washing, reading, and results data management for EIA tests
- Scalable solution with ease of processing multiple assays simultaneously



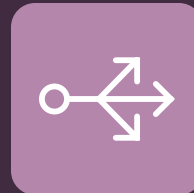
## Automated

- User friendly
- Bidirectional LIS interface
- Remote technical support of instrument and reagents
- Open programming for additional EIA tests



## Scalable

- Low to high volume sample processing
- Flexible processing of one or multiple tests at a time
- Positive patient sample and reagent processing identification
- Continuous assay loading



## Flexible

- Large autoimmune and infectious disease test menu
- Algorithm management: reflex testing of initial reactive results
- Comprehensive event log
- Intuitive processes

# EVOLIS System Automation

The right solution for low  
to high volume testing

## Pipette Tip Station

- Disposable tips (eliminate carryover)
- 5 racks of 96 tips
- 300 µl or 1,100 µl

## Predilution/ Archiving Station

- 288 samples

## Wash Buffer Drawer

- 4 wash bottles

## Wash Station

- 8-channel double probe manifold
- Independent aspiration and dispense cycles

## Pipette Arm

- Performs plate dilutions
- Level sensing
- Clot and low volume detection (by capacitance and air pressure)

## Incubators

- Four incubators (temperature regulated)
- Four incubators (ambient temperature)

## Microplate Pipette Station

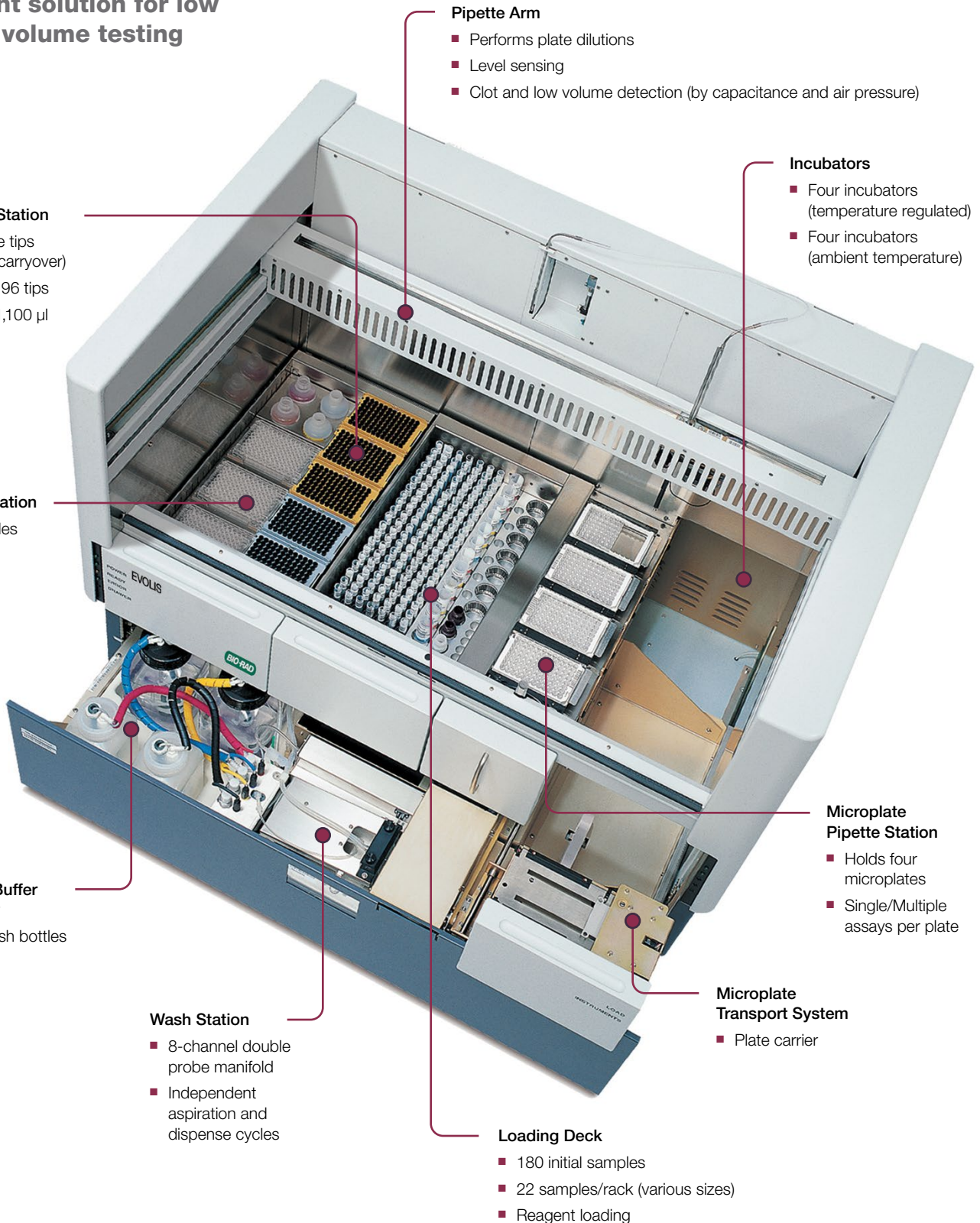
- Holds four microplates
- Single/Multiple assays per plate

## Microplate Transport System

- Plate carrier

## Loading Deck

- 180 initial samples
- 22 samples/rack (various sizes)
- Reagent loading



# EVOLIS System Specifications

## Sample Processing

Primary sample capacity	up to 180 samples
Dilution capacity	3 dilution plates
Usable diameter (container)	up to 16 mm
Usable height (container)	up to 100 mm
Container mixing	yes
Sample dilution (direct)	up to 1:20
Sample dilution (tube or plate)	up to 1:10,000
Carry-over	N.A. (tip use)

## Reagent Processing

Reagent containers	Bio-Rad original kit bottles, V-vials, 2 ml microtubes with 13 x 75 tubes, 125 ml bottles
Reagent vials volume (mL)	2, 8, 15, 22.5, 31.5, 120
Perishable reagent addition	yes
Reagent identification	internal barcode reader
Lot & expiration management	yes

## Disposable Tips

Carbon tips	300–1,000 µl
Volume (useable)	10–1,000 µl
Liquid level & clot detection	capacitive + air pressure
Onboard capacity (walkaway)	480 tips (5 x 96)

## Processing Features

Patient samples (100 µl/well)	<16 min/plate
Reagent (100 µl/well)	<4 min/plate
Dilution (1:10)	<23 min/plate
Dilution (1:100)	<45 min/plate
Precision (at 10 µl)	<3% CV
Precision (at 100 µl)	<0.5% CV
Accuracy (at 10 µl)	<3%
Accuracy (at 100 µl)	<0.5%

## Work Table

Capacity	4 plates
Shaking (linear)	variable time

## Incubators

Loading slots	4 x ambient °C
Chambers (independent)	4 (ambient + 5–50)°C
Precision	±0.7°C
Accuracy	±1.0°C mean of plate
Uniformity	±1.1°C across plate
Overshoot	max 1°C
Incubation time	programmable
Warm-up (to 37°C)	30 min
Temp. display & tracing	yes

## Washer

Capacity	1 plate, up to 3 wash buffers
Manifold	8 channel
Plate type (bottom shape)	flat, u- or v-shaped
Dispense volume	200–2,500 ml/well
Precision	±5% CV at 300 µl
Residual volume	<1 µl in u-shaped bottom, <5 µl in flat bottom

## Photometer

Reading head	8 channel
Reading time (full plate)	<15 sec
Filter wheel	8 (equipped with 405, 450, 492, 550, 620, 690 nm)
Linearity (0–2.3 O.D.)	1%
Precision (0–2.3 O.D.)	2.5%

## Communication

RS-232 serial port	yes
On-line (bi-directional)	ASTM

## Dimensions

### Processor module

Size as mm (H x W x D)	950 x 1,130 x 760
Weight as kg	130

### Table module

Size as mm (H x W x D)	550 x 1,200 x 800
Weight as kg	40

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