Chem & Well[®] 2910 Technical Specifications

- Typical throughput
- Typical reaction volume
- **Dimensions**
- **Capabilities**
- **Pumps**
- **Probes**
- Min. and Max. Volume
- Precision for volumes <5µL
- Precision for volumes >5µL
- Maximum number of reagents
- Standard reagent rack
- Reaction vessel
- Instrument bottles
- **EIA** mode
- Thermal control
- Reagent cooling
- Wash head
- **Programs**
- Optical design
- Interference filters
- **Linear Range**
- **Photometer Accuracy**
- **Format**
- Supports
- Calculation modes
- Self monitoring modes
- QC options

General

Up to 200 endpoint reactions per hour, up to 170 kinetic reactions per hour.

36.25"(92.1cm) width, 18.75"(47.6cm) height, 21.5"(54.6cm) depth. Approximate weight 80 lbs (36Kg).

Reagent and Sample Dispensing

Dilution, pre-dilution, dispensing single or multiple reagents.

Two syringe pumps, sized 50µL and 2.5mL.

316 stainless steel for maximum reagent compatibility, level sensing.

2µL - 1.95mL <2.5% CV

<1% CV

Maximum number of specimens 96 (including calibrators and controls).

Typically 27 to 44 or more (you can program reagents to go in the sample rack; assorted replaceable racks and custom designed racks are available for various bottle sizes).

27 positions, other configurations optional.

Standard microwells, strips or plates.

2L wash with low volume warning sensor.

1L rinse (or second wash) with low volume warning sensor.

2L waste bottle with full sensor.

1L priming bottle.

Drain bottle (not supplied).

Incubating, timing, and temperature control

Incubation timing is software controlled and automatically optimized. Well, probe, and tubing; ambient or 37°C (other options also available). RCA, Reagent Cooling Accessory (optional) cools 12° to 15°C below ambient through Peltier thermoelectric modules connected to an external controller.

Washing

8-probe, automatic prime and rinse.

Wash protocols are user-programmable for aspirate, dispense, soak, mix.

Reading

Reads bichromatic absorbance in 4 channels.

User-selected monochromatic or bichromatic results.

8 position filter wheel: 340, 405, 450, 505, 545, 600, 630, 700, or custom. Long life, hard coat, ion assisted deposition, 10nm typical half bandpass. 0.00 to 3.0A.

± 1% or better, NIST traceable calibration.

CD-ROM and internet upgrades.

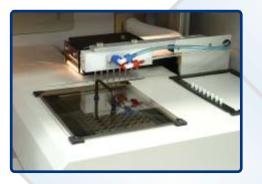
Windows®XP, Vista, or 7 with CD drive, serial or USB port (Computer not supplied). Absorbance, single standard, factor, fixed time kinetics, kinetics by multipoint. kinetics by standard or factor, multipoint, linear regressions, polynomial, cubic spline, 4-parameter, cutoff by absorbance or standard, and more. Lamp, bottle volumes, filters, pressure, vacuum, mechanical function, and more. Store control data, print Levey-Jennings or QC range plots.

Certifications

NRTL Listed, CE Marked.

Awareness Technology is certified under ISO 13485:2003.

Chem «Well® 2910 **Biochemistry** and **EIA**



combined in one modern system









Chem & Well® 2910

For the modern laboratory



An open system you can program for the reagent applications of your choice

Chem Well is a completely open system that is easy to program.

Set up assays, routine jobs, quality control, panels, even index calculations to suit your laboratory. A password system and log of changes protect your programs.

Choose from a large selection of monitoring and reporting styles.

Precise pipetting of low volume specimens, elimination of carryover, and careful control of temperature are all essential for reliable results.

Chem Well can make pre-dilutions, however this is seldom necessary since a high level of precision is achieved even with a 2µL sample. Carryover is eliminated without the need for disposable pipet tips. A unique wash cup assures cleaning inside and out. In addition, extra washes may be programmed for any particularly sensitive assay. With a completely open system you can program additional wash volume, or increase the number of washes, or even direct the probe to pick up and dispense a probe cleaning solution after each specimen.

Chem • Well can process EIA's at ambient temperature or 37°C. An incubator is provided for biochemistry wells to assure precise kinetic reactions. The probe is also temperature-controlled to deliver 37°C reagents. An optional reagent cooling accessory (RCA) is available to protect reagents from ambient heat. Removable racks can be refrigerated, pre-loaded and ready for the next use.

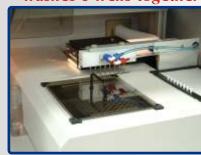
27 reagents, 96 samples



probe washes inside and out



washes 8 wells together



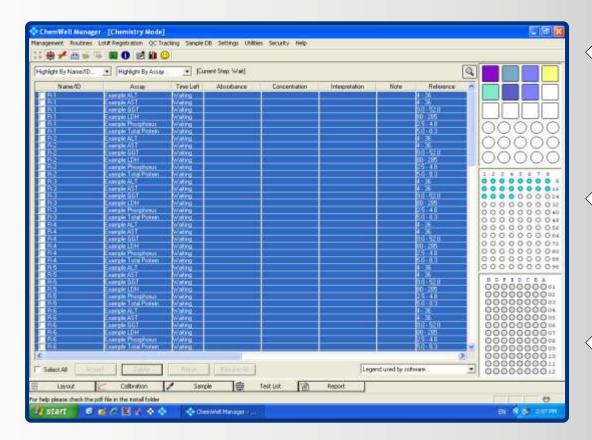


Chem ❖ Well® is designed and manufactured in the USA by Awareness Technology, Inc. PO Box 1679 Palm City, FL 34991 USA tel: 772-283-6540 fax: 772-283-8020 email: info@awaretech.com website: http://www.awaretech.com Chem ❖ Well® is supplied only by qualified, factory-trained distributors.

Chem Well is truly two instruments in one.

Set up a full or partial plate of enzyme immunoassays (EIA) and program Chem *Well* to automatically make dilutions, dispense reagents, incubate, wash, read, and prepare final reports.

Chem Well uses uncoated microwells to run low-volume samples for biochemistry reactions. Performing biochemistry assays in microwells offers many advantages, among which are increased throughput and decreased cost per test. The wells can also be washed for re-use. You can also program Chem Well as a batch analyzer or a continuous loading random-access analyzer for performing clinical biochemistry tests. Chem Well reads vertically using 4 optical channels and 8 wavelengths.



- 1. Choose chemistry or EIA mode.
 - 2. Load reagents, samples, and microwells.
 - 3. Select assays and report formats.

THE REST IS AUTOMATIC



200 tests per hour No carryover Liquid-sensing probe tip

Easy to maintain
Makes automatic service reports
Low cost lamps

Reaction
volume < 250uL
No custom
disposables
IAD filters

Edit standard curves Self-monitoring mechanics and optics

Open system QC tracking Reflex testing STAT

8-well
wash head
Level-sensing
wash, rinse, and
waste bottles
LIS

220 or 110 VAC input safety shields removable racks