



ThunderBolt®

EIA & Chemiluminescence Analyzer

The ThunderBolt® is an innovative 2-plate, fully automated, open platform, that can run ELISA and Chemiluminescence (CLIA) assays. This walk-away instrument was designed to simplify your laboratory experience, increase your productivity, and reduce your waste.

Main Features:

- Slide-in racks with positive sample identification
- Simple workflow software that guides you through the process
- Designed to suit different laboratory demands
- High sample loading capacity: 192 primary sample tubes
- Capable of running many different protocols in a single batch
- On-board camera allows remote troubleshooting
- No disposable tips, minimal consumables, direct in-well dilution (up to 1:100)
- Occupies minimal bench space

Validated protocols for:



SENSISpec Allergen ELISA Kits

- | | |
|-------------|-----------|
| ■ Almond | ■ Mustard |
| ■ Casein | ■ Milk |
| ■ Egg White | ■ Soy |
| ■ Gluten | ■ Peanut |



BACSpec Pathogen ELISA Kits

- *Listeria*
- *Salmonella 2*



Environment & Water ELISA Kits

- Glyphosate
- 5 Cyanotoxin Kits



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Capacity

Sample Capacity	12 racks of 16 samples. Up to 192 samples total
Reagent Capacity	2 racks of 7 reagents. Up to 14 reagents total
MTP Positions	2 positions
Pre-dilution MTP Positions	1 position
Wash Buffer	2 x 1L external wash bottle positions
Liquid Waste	1 x 2L external waste bottle position

Worklist Set-up

Sample Loading	Slide-in Racks w/ barcode reading
Test Tube Size(s)	Accepts from 12 to 16 mm diameter, up to 100 mm tall tubes
Reagent Loading	Slide-in Racks w/ adapters for most common bottles
Reagent bottle size(s)	22-42 mm diameter bottles accepted

Liquid Handling

Probe/Needle	Single probe, dual needle
Probe tip	Fixed needle, Washable stainless steel
Liquid level detection	Conductivity
Aspiration Volume Range	1 uL - 400 uL with $\leq 3\%$ CV
Dispense Volume Range	25 uL - 300 uL

Hardware

Incubator technology	Forced convection to eliminate "edge effect"
MTP Positions & Temperature	2 positions. Room temperature to 40 °C
Spectrophotometer	5 filters: 405, 450, 490, 550 and 630 nm wavelengths, Linear Range 0 to 3.0 OD
Photomultiplier Tube (PMT) *	Detection type: glow chemiluminescence, Spectral range: 300-500 nm, Dark count: 50 counts per second
Orbital MTP Shaker	Amplitude: 1 mm, Speed: Up to 900 RPM, 3 MTP (2 reaction, 1 predilution)

Software

Language	Multi-language support
User Interface	MS Windows 10 Graphical User Interface
Instrument Manager	Independent well tracking and timing. Results review. In-process controls & maintenance prompts
Data Server	Database of results, maintenance logs, lot/expiry information, etc., connects multiple instruments and consolidates data, LIS integration: Bi-directional, RS232, USB, TCP/IP

General Information

Ordering No.	00300 (ELISA); 00300-CL (ELISA+CLIA)
Power Specifications	Voltage: 100-265V. Frequency: 50-60Hz. Consumption: 12W w/o incubator, 120W max
Dimensions, Weight	W: 64 cm, D: 57 cm, H: 45 cm (W: 25.2 in, D: 22.5 in, H: 17.7 in), H (open): 91.5 cm (36 in), Weight: 30 kg (65 lbs)
CE Marked	Yes