

Technical Point of View

TriStar2 LB942



The Tristar2 is a very unique instrument that can be upgraded over time.

The TriStar² has been developed to support a fully modular approach. Any combination of reading technologies and options can be composed maintaining all possibilities of later upgrades.

3 different technologies consist of:

* **Flash and Glow Luminescence (BRET)**

* **Fluorescence (FRET)**

* **Absorbance**

Features:

- ** The **photomultiplier tube** used in the TriStar² is operated in state-of-the-art ultra-fast digital single photon-counting mode with pulse height discrimination. A stringent selection procedure with extremely narrow limits provides for the lowest background and highest efficiency; this ensures reliable and superior performance without calibration.
- ** Spectral range of the PMT is 340-680nm. Because of this we can offer optimum performance and sensitivity due to unique optical system "**ONE4ALL**", the ONE4ALL uses one optical path for all 3 technologies without compromising sensitivity.
- ** The sensitivity for **Luminescence**: <6 amol ATP; <3 zmol firefly luciferase, which is better than most stand-alone luminometers.
- ** The **Fluorescence**: < 0.3 fmol FITC, which again is better than most stand-alone readers
- ** **Absorbance**: 0 - 3.5 OD @ 400 - 700 nm (0 - 3 OD @ 340 nm) precision <0.6 % cv (@ 2.5 OD) accuracy <2 % cv (@ 2.5 OD) with specifications that meet or exceed other readers.
- ** With our **low crosstalk** design we are able to achieve <5 X 10⁻⁶.



** The instrument can have up to 3 internal bellows type reagent **"JET" injectors**. All of the injectors are in the front of the instrument for easy access and can be chilled on ice with our waterproof tray. Two of the injectors are in the Luminescence measurement position for true flash assays and the other is in the pre-measurement position from 10ul to 100ul volume and can be used with 384 well applications.

These injectors are not syringe type which tends to clog and wear out faster than Berthold's bellows type injector. The injectors combine high speed and reliable mixing of reagents with outstanding precision into 96 and 384 well plates.
>99% precision, >99% accuracy with a CV of <3%.



** The instrument also has a 5-position **emission filter slide** and 5-position **excitation filter slide**.

** Standard **plate height adjustment** to accommodate 6-384 well plates and optional

** **Temperature control** with cooled PMT, plate heating +5°C above RT and 45°C.

SPECIAL!! ** SPECIAL!! ** SPECIAL!!

5% DISCOUNT

ALL Microplate & Tube Luminometers!



Terms & Conditions

Promotions apply to Continental USA & Mexico only.

This offer has no cash value. No substitutions allowed.

Does not apply to any instrument not listed above.

Berthold Technologies reserves the right to change the terms of or discontinue the promotions without further notice. Additional discounts of any type not permitted with promotions.

All previous promotions are no longer valid.

Promotions effective until December 31, 2014. No exceptions.

**For additional information on any Berthold product
OR TO SCHEDULE A DEMO
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