

GreenLight™ Model 930



Same Day Bacterial Analysis of Foods and Beverages



Illuminating Discovery®

A Breakthrough in FOOD SAFETY

An efficient carousel based system for enumerating bacterial load with high throughput and high sensitivity capabilities.

Model 930 Description

The **GreenLight™** Model 930 provides an efficient and flexible solution for the detection and measurement of aerobic bacterial respiration in food and beverages. As bacteria in the sample grow, they deplete O₂ which is detected as an increase in the GreenLight™ probe signal. The time required for this signal to reach a critical threshold is then used to calculate the CFU/g value of food sample, based on a pre-determined calibration. Unlike the traditional agar or film plate methods, the GreenLight™ Model 930 reduces sample preparation time, the overall cost of testing and provides same-day results at the touch of a button.

The GreenLight™ Model 930 incorporates the **APCheck™** vials using a carousel system. Like the Model 910, this system provides results within hours (1-14hrs depending on the bacterial load) facilitating a convenient and cost effective enumeration of bacterial load in a variety of food and beverage samples but with the additional benefit of higher throughput (48 samples per carousel).

The Model 930 is suited for in-process or hygiene monitoring environments within food companies where throughput is a key requirement.

Features	Benefits
Fast results / Same-day turnaround	<ul style="list-style-type: none"> Results reported within hours: Bacterial load of: ~ 7 Log CFU/g in just over 1 hour ~ 1 Log CFU/g in just over 14 hours
High Throughput	<ul style="list-style-type: none"> Possible to process 432 samples (9 carousels) on a single instrument in one day
Compact and flexible	<ul style="list-style-type: none"> Bench top reader available in two vial sizes: 930-2 (2ml) and 930-15 (15mls)
High sensitivity	<ul style="list-style-type: none"> Wide contamination range detected from 7 Log to 1 Log CFU/g
Simple and rapid protocol / easy to perform	<ul style="list-style-type: none"> Minimal "hands-on" time required – just add sample to vial and test! Sample prep same as traditional agar method with no dilutions uninterrupted addition of new tests possible while others are already in process
Cost-effective	<ul style="list-style-type: none"> Reduction on plastics, media, consumables, storage and incubation space Saving on labour costs
Automatic sample identification using bar codes	<ul style="list-style-type: none"> Vials and carousels barcoded and scanned automatically by instrument- Eliminates sample ID errors and speeds up testing time.
Easy interpretation of results	<ul style="list-style-type: none"> Calculated results displayed on instrument readout. Colour coded "Traffic Light" flagging system makes easy visualisation
Results processed and displayed automatically	<ul style="list-style-type: none"> Different testing modes available : Quantitative / Semi Quantitative (CFU/g or Log CFU/g) and pass / fail Eliminates subjective colony counting
Comparable to reference method	<ul style="list-style-type: none"> Excellent correlation with agar method (ISO:4833:2003)
Preventative approach to food safety	<ul style="list-style-type: none"> Results available before food hits the shelves or leaves the factory Suitable as an in-process control or hygiene monitoring tool

Model 930 Specifications

Reader and APCheck™ vials:

Power

Input: 100-240VAC
Voltage for USB port: 5 +/-0.25 volts

Dimensions

(Width x Height x Depth)
30.5 cm x 31.8 cm x 38.1 cm
(12 in x 12.5 in x 15 in)

Weight: 12.3 kg. (27 lbs.)

Instrument Type

Fluorescence Plate Reader

Contamination Range

1 Log – 7 Log CFU/g (for raw meat)

Time To Result incl. sample preparation

1 -14 hours

Testing Modes

Pass/Fail or Quantitative/Semi-Quantitative

Incubation Temperature

Ambient + 3° to 40°C

APCheck™ Vials

Disposable 2ml or 15ml screw capped vials with bar codes containing sensing material for the measurement of bacterial load. 24 vials per pack

Environmental conditions

Temperature: 18-24oC (64.4°F - 75.2°F)
Relative humidity: 0-95% non-condensing

Ordering Information:

Catalogue No. Product Description

001-513	GreenLight™ Model 930 instrument (for 2ml vials)
001-514	GreenLight™ Model 930 instrument (for 15ml vials)
050-899	2ml APCheck™ vials (24 per box)
050-900	15ml APCheck™ vials (24 per box)

List of accessories available: contact Luxcel for further information

Distributed By:



Illuminating Discovery®

Luxcel Biosciences Ltd specialise in the development and manufacture of luminescence based sensors and related biological tests in the areas of:

- Cell Biology Research – to assess live cells and drug toxicity by monitoring respiration
- Packaging – for non-invasive monitoring of package integrity and shelf life
- Food and Beverage Safety – to screen for bacterial contamination

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