

**TIANLONG**  
BIOLUM



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**TIANLONG**  
BIOLUM



**Portable ATP  
Hygiene Monitoring  
System Biolum**

Your reliable hygiene safety guardian



Bring Technology to Life



# Biolum

Your reliable hygiene safety guardian

## FEATURES & BENEFITS

### Sensitive

Detect down to  $10^{-16}$  mol of ATP

### Fast

Result in 10 sec for one test

### User Friendly

3.5" high resolution color screen, intuitive menus, less bottoms, simple to use

### Intuitive result

Pass, Caution, or Fail result symbols are intuitive for any user

### Template

Pre-configured templates including different industries and locations together with upper and lower limits can start your test immediately

### Connectivity

Connect PC via USB, connect printer or app in Android system mobile phone and pad through Bluetooth

### Highly Portable

within 300g with Battery, 189x70x36mm

### Powerful Memory Capacity

255 test plans, 255 user IDs, 2000 test program, 1000 results

### Low consumption

Using Li-ion battery that can work more than 8h continually

### Open Reagents

Compatible with swabs from other manufacturers



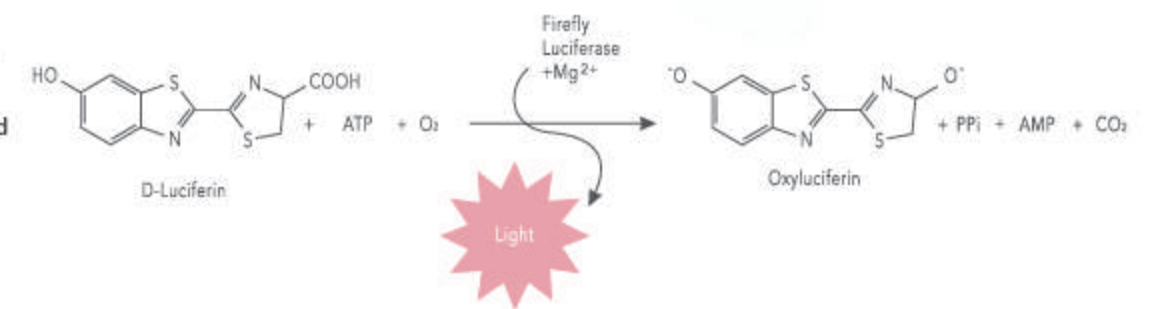
# Quickswab

ATP QuickSwab is simple to use, all-in-one and pen-sized sampling device, with the pre-moistened swab that offers extraordinary accuracy and precision for many industrial applications.

## SWABS FEATURE



- 1 Sampling & Reaction together, easy to use
- 2 Pre-moistened swab tip
- 3 Accurate, high reproducibility
- 4 10s for one test



Biolum Portable ATP Hygiene Monitoring System, a powerful tool for implementing and managing your hygiene monitoring program. Taking advantages of the progressive QuickSwarb surface test, the hygiene level of the tested surface will be evaluated in seconds, and the results can be visualized on screen. Featuring the state-of-art technology, the Biolum is a user-friendly, flexible, and accurate quality monitoring system. It has all the features to maximize its value to your business.

Adenosine tri-phosphate (ATP) is a molecule found only in and around living cells in like all animal, plant, bacteria and yeast, and as such it gives a direct measure of biological concentration and health. ATP is quantified by measuring the light produced through its reaction with the naturally-occurring firefly Luciferase using a Luminometer. The amount of light produced is directly proportional to the amount of living organisms present in the sample.



## HOW IT WORKS

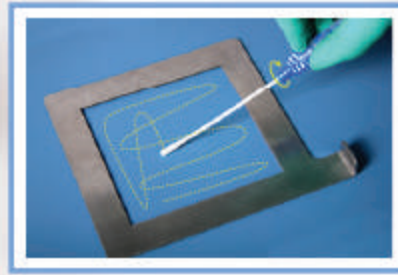
The whole measurement procedure is easy to learn and test data can either print by bluetooth printer, or export through data export software on PC for your documentation, data export software is an easy-to-use data analysis software that comes free with every Biolum system.



1. Device Self-Checking



2. Checking the swab



3. Sampling



4. Injection



5. Insertion



6. Measuring



Bluetooth Printer

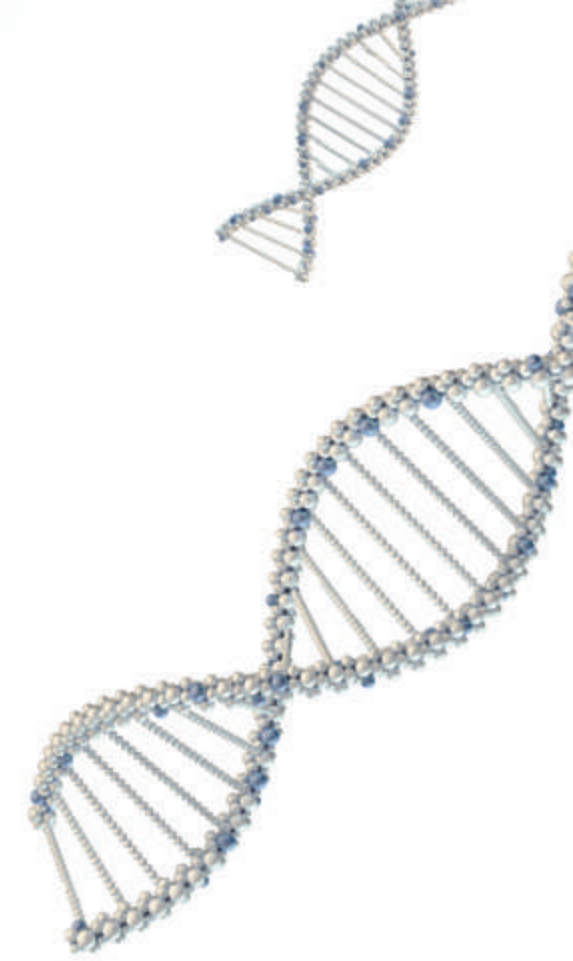
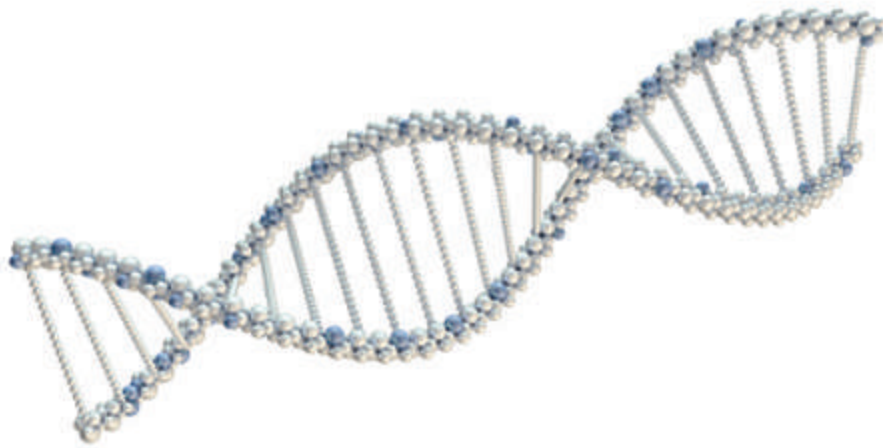


Software Interface



### RESULT EXPORT

| DvIceID | UserID | Plan Name | Prog | Location | Surface | Result | RLU   | Lower_ID | Upper_ID | Test Time | Test Date |
|---------|--------|-----------|------|----------|---------|--------|-------|----------|----------|-----------|-----------|
| 99745   | 0      | 0         | 0    |          |         | Pass   | 0     | 10       | 30       | 19:22:00  | 2014-4-24 |
| 99745   | 0      | 0         | 0    |          |         | Pass   | 0     | 10       | 30       | 10:32:00  | 2014-4-24 |
| 99745   | 0      | 0         | 0    |          |         | Pass   | 0     | 10       | 30       | 10:33:00  | 2014-4-24 |
| 99745   | 0      | 0         | 0    |          |         | Pass   | 0     | 10       | 30       | 11:20:00  | 2014-4-24 |
| 99745   | 0      | 2         | 0    |          |         | Fall   | 10976 | 10       | 30       | 11:21:00  | 2014-4-24 |
| 99745   | 0      | 2         | 0    |          |         | Fall   | 10964 | 10       | 30       | 11:22:00  | 2014-4-24 |
| 99745   | 0      | 2         | 0    |          |         | Fall   | 10961 | 10       | 30       | 11:23:00  | 2014-4-24 |







## APPLICATIONS



## SPECIFICATIONS

| ITEMS                                      | PARAMETER   |
|--|---|
| <b>Biolum</b>                              |   |
| Dimensions                                 | 189 mm × 70 mm × 36 mm  |
| Weight                                     | ≤ 300 g   |
| Detection limit                            | 10 <sup>-18</sup> moles ATP                                   |
| Detection Deviation                        | 5 % or ±5   |
| Self-calibration at startup                | 15 s or 60 s  |
| Real-time detection time                   | 10 s/test   |
| Memory Capacity                            | 255 test plans, 255 user IDs, 2000 test program, 1000 results |
| Communication Interface                    | USB, Bluetooth  |
| Reproducibility                            | CV 8 % ~ 20 %   |
| Correlation Coefficient                    | R <sub>2</sub> ≥ 0.99   |
| Power Supply                               | Rechargeable battery  |
| Running Time                               | continuously work for > 8 hrs, standby for > 600 hrs          |
| Temperatures allowed during operation      | 5 ~ 40 °C   |
| Relative humidity allowed during operation | < 60 %  |
| <b>QuickSwab</b>                           |   |
| Swab storage                               | 2 ~ 8 °C : 12 months  |
| Swab compatible                            | Hygena SystemSURE Plus, EnSURE, Others                        |
| Swab packing specifications                | 5 pieces/package, 20 pieces/package, 100 pieces/box           |

