

Idaho Technology**R.A.P.I.D.® LT Food Security System**

Part of Idaho Technology's Industrial Product Security Line

Information Sheet

High Speed Real-Time PCR

Built upon LightCycler® technology, the R.A.P.I.D. LT instrument combines rapid air thermocycling and a real-time fluorimeter to reliably identify test food samples in less than 35 minutes. In addition to the instrument, robust freeze-dried reagents have been designed and optimized to run on this instrument and provide the results you need. Because of its sensitivity, accuracy, and high speed, it is the ideal instrument for rapid food borne pathogen identification.

The laptop computer which is included with the instrument comes pre-loaded with easy-to-use Food Security System run and analysis software. The software not only operates the instrument but automatically collects and analyzes data, then reports the results in an easy-to-read and printable format.

U.S. Patent Nos.: 6,787,388, 6,174,870, 6,197,520, 6,245,514, 6,303,305, 6,387,621, 6,509,720, 6,589,627, 6,730,901, 7,081,226, 7,160,988 and pending patents

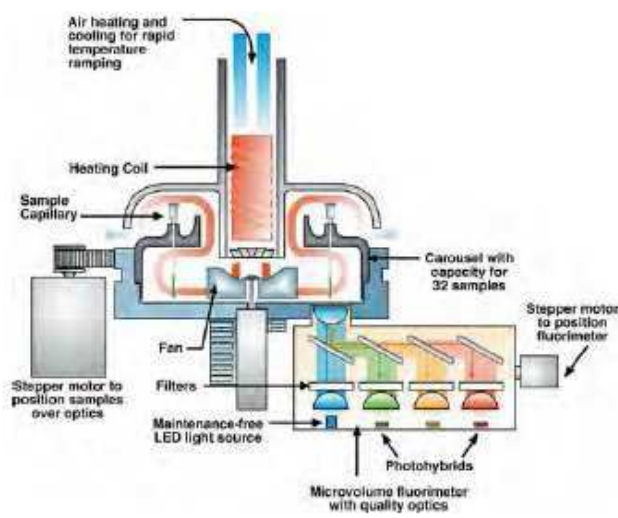
- **Instrument**
 - Rapid air thermocycling
 - 32-sample capacity
 - 45 cycles in 35 minutes
 - Three-color optics for internal controls
 - Accurate and highly reproducible results
 - **Software**
 - Automatic analysis
 - End report of results
 - Melting curve analysis
 - **Reagents Available***
 - Salmonella
 - E. coli O157:H7
 - Listeria
 - Avian Influenza
- * Check Web site for additional test assays



Proven Instrument Design

The unique design of the R.A.P.I.D. LT allows it to achieve a high uniformity of temperature and ultra-rapid transitions ensuring faster results and higher accuracy.

- Heating and cooling are achieved by varying fan speeds and a controlled heating coil.
- Three-color optics module allows fluorescence monitoring over a wide range of wavelengths providing multiplex capabilities for internal controls.



Food Security System Software



The software has been specifically designed for ease-of-use and tailored to the Food Security System line.

Wizard based setup

The software walks the user through the setup for each run.

Automatic Analysis

Software analyzes results and gives warning of positive samples.

Results Report

Customizable report is printed at the end for archiving and Records.

R.A.P.I.D. LT and Laptop Specifications

| Sample Description | |
|--------------------|--|
| Sample Capacity | 32 |
| Sample Type | Composite glass/plastic reaction vessels (Roche capillaries) |
| Volume Size | 5-20 µl |

| Fluorescence Acquisition | |
|--------------------------|-------------------------------|
| Optics Modules | Three-color |
| Peak Emission | Blue LED excitation of 470 nm |
| Emission Wavelengths | 530, 640, and 705 nm |

| Power Supply | |
|-------------------|--------------------------|
| Power Supply Unit | 110/220 V auto-switching |

| Instrument Dimensions and Weight (w x d x h) | |
|--|---|
| Size: | 12" x 16" x 16" (30.4 x 40.6 x 40.6 cm) |
| Weight: | 25 lb (11.3 kg) |

| Performance Parameters | |
|------------------------|---------------------|
| Sample Run Time | ≤ 35 minutes (Avg.) |

| Temperature Control | |
|---------------------|-----------|
| Range | 40-100 °C |


| Desktop Software | |
|--|--|
| Pre-programmed protocols | |
| Windows-based software wizard to add samples and information | |
| Real-time display of fluorescent readings | |
| Customizable printable reports | |
| Automated Qualitative Analysis | |

| Laptop Computer | |
|--|--|
| Windows® XP Operating System with an Intel® Pentium® M Processor | |

| Instrument Certifications | |
|---------------------------|-------------------------|
| CE Certified | Manufactured under cGMP |

Test Kits and Ordering Information

| Test Kits | Part No. |
|--|---------------|
| Each test kit comes with small bead tubes and reagents for testing 20 samples. | |
| Listeria LT Test Kit | ASAY-ASY-0117 |
| E. coli LT Test Kit | ASAY-ASY-0118 |
| Salmonella species LT Test Kit | ASAY-ASY-0116 |
| Iccho Technology offers a complete line of test reagents for testing threat and environmental samples. Visit our web site for an updated list. | |

| Instrument | Part No. |
|---|---------------|
|  R.A.P.I.D. LT Food Security System with Laptop and Software | RPLT-ASY-0004 |
| Each system comes with the following items: Laptop with installed software and cables, customer software install CD, centrifuge, Disruptor Genie™, R.A.P.I.D. LT User's Manual, serial cable, power cord 110V-120V w/ground, power cord 200V-220V w/ground, Start-up Kit, Basic Tool Kit | |

Custom freeze-drying services available. Contact us for details.