

Life Technologies - Veriti Thermal Cycler



GENERAL DESCRIPTION:

The Veriti® Thermal Cycler is a high quality instrument for amplifying target DNA sequences using Polymerase Chain Reaction (PCR). Veriti® Thermal Cyclers are available for research or diagnostic use.

TECHNICAL DESCRIPTION:

Veriti® performs polymerase chain reaction amplification of genes on a peltier-based thermocycling apparatus.



CONTACT INFORMATION

Life Technologies
5791 Van Allen Way
Carlsbad, CA 92008

COST

- \$7,995/system
- ~\$2/analysis

Tier Selection

Final tier assignment is based on overall product score.

- Top Tier Second Tier Third Tier
 Fourth Tier Bottom Tier

RANKINGS

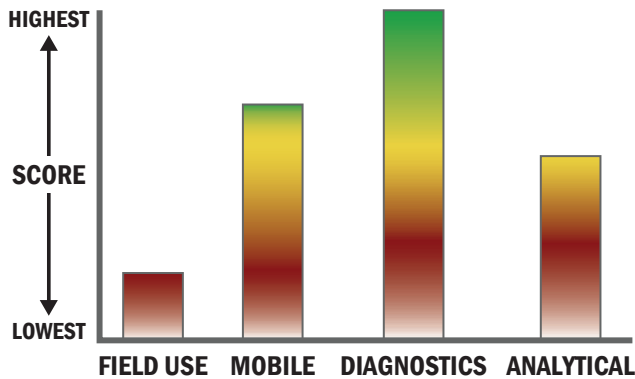
	Biological	Chemical	Radiological
FIELD USE System			
MOBILE Laboratory			
DIAGNOSTIC Laboratory			
ANALYTICAL Laboratory			

Survey Source

Vendor Supplied Information

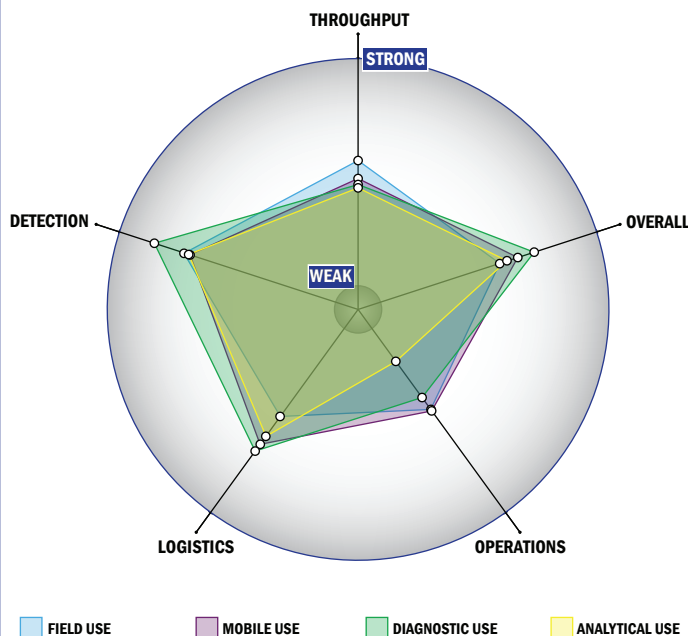
Scoring Analysis

System scores are compared across the four scenarios and ranked from highest to lowest.



Impact Chart

The Impact Chart is a spider graph representing specific categories and designed to give the reader a visual depiction of how a particular system is expected to operate across the four different scenarios. The score for each of the seven categories is presented as the percentage of the total possible score. Higher category scores extend the spokes of a graphic toward the outer edge of the chart. The area graphed for each of the four scenarios relates to how well the system performed in that scenario. Graphics for each of the four scenarios are super-imposed for ease of comparison.



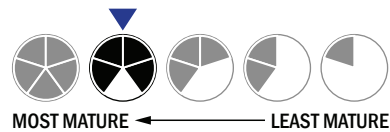
Evaluation Criteria

Throughput:

- Between 60 minutes and 8 hours for detection
- Multiple samples, multiple tests/sample per run
- 749-350 samples every 2 hours
- The system could be adapted to a semi-automated system with some effort
- Device or system is intended for multiple detection assays
- 2 solutions, buffer, eluents, and/or reagents
- 2 components
- 5-10 minutes is required for set-up
- 3-5 steps are required for detection

Logistics:

- More than a day of training and significant technical skills are required
- Approximately the size of a toaster
- Between 5 and 25 kg
- Wired connections are available
- System or device has 220V electrical requirement



Operations:

- Can be used from 4 °C to 41 °C
- Components must be frozen (-20 °C)
- Performance is not influenced by relative humidity
- Between 6 months and 1 year shelf life
- 5-10 years expected life
- Results cannot be viewed in real-time
- The system is not capable of autonomy

Detection:

- Efforts are underway to achieve 510K clearance
- System currently has FDA approval
- Less than 50 µL
- Excellent specificity. System has occasional false alarms under certain conditions (<2%)
- 1-100 CFU per mL
- 1-100 PFU per mL
- Manual kit not integrated with the system handles spore lysis