Applied Biosystems - ViiA 7 Real-Time PCR System



GENERAL DESCRIPTION:

ViiA 7 Real-Time PCR System can serve various purpose from testing environmental samples, verifying and quantifying bacterial or viral existence, and validating DNA/RNA sequence existence.

TECHNICAL DESCRIPTION:

Instrument that employs real-time TaqMan® polymerase chain reaction amplification of genes on a peltierbased thermocycling apparatus. The ViiA 7 Real-Time PCR System is available in 384-well, 96-well, Fast

96-well or proprietary TaqMan Array 384-well low volume format.

CONTACT INFORMATION

Applied Biosystems 850 Lincoln Centre Drive Foster City, CA 94404 650-638-5800 www.appliedbiosystems.com

COST

- \$71,000/system
- \$1-2/analysis

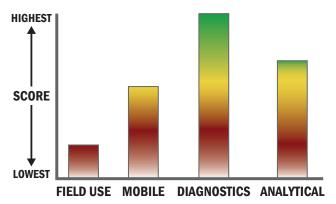
Tier Selec	ction		
Final tier assignment is based on overall product score.			
Top Tier			
Generation Fourth Tier Bottom Tier			
RANKINGS			
	Biological	Chemical	Radiological
FIELD USE System		N/A	Ŋ/A
MOBILE Laboratory		N/A	Ŋ/A
DIAGNOSTIC Laboratory		N/A	Ŋ/A
ANALYTICAL Laboratory		ŊĄ	Ŋ/A

Survey Source

Vendor Supplied Information

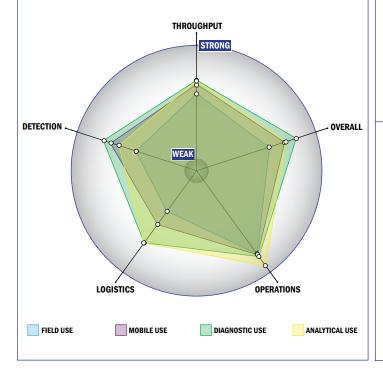
Scoring Analysis

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.



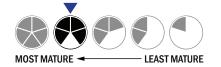
Evaluation Criteria

Throughput:

- Between 60 minutes and 8 hours for detection
- Multiple samples, multiple tests/sample per run
- Greater than 750 samples every 2 hours
- The system or device is currently fully automated
- Device or system is intended for multiple detection assays
- 5 or more solutions, buffer, eluents, and/or reagents
- 2 components
- Less than 5 minutes is required for set-up
- 1-2 steps are required for detection

Logistics:

- An afternoon of training and some technical skills required
- Approximately the size of a home dishwasher
- More than 50 kg
- Wired connections are available
- System or device has 110V electrical requirement



Operations:

- Can be used from 4°C to 37°C
- Components must be stored at 4°C
- Performance is not influenced by relative humidity
- Between 6 months and 1 year shelf life
- 5-10 years expected life
- Results can be viewed in real-time
- The system or device is currently fully autonomous
- The system software is open but modification requires licensing
- The system hardware is open but modification requires licensing

Detection:

- Efforts are underway to achieve 510K clearance
- Efforts are underway to achieve FDA approval
- This system does not test liquids
- Superior specificity. System has a false alarm rate approaching zero (~0%)
- Spore lysis not necessary for detection by system