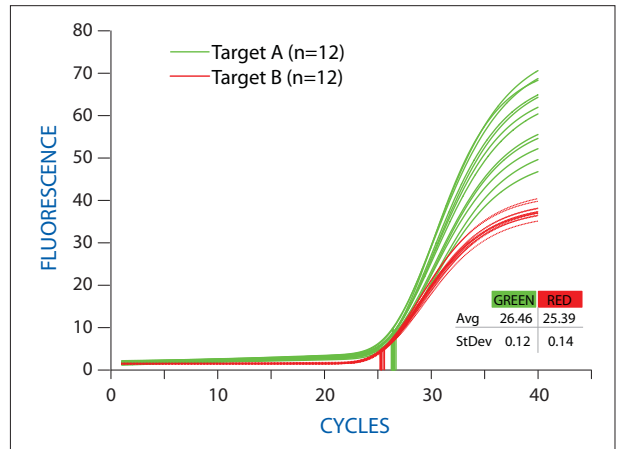


↙ DNA Analyzers for on demand, non-batched testing

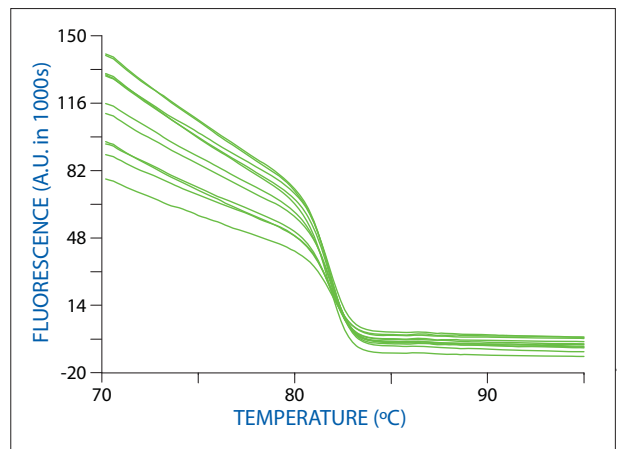


Duplex reactions run across the 12 wells of the Spartan DX-12® demonstrate excellent well-to-well precision.

Spartan DX-12™

- Fast:** PCR results in 30 to 90 minutes
- Affordable:** Affordable for all labs
- Easy to use:** Learn to use it in 10 minutes

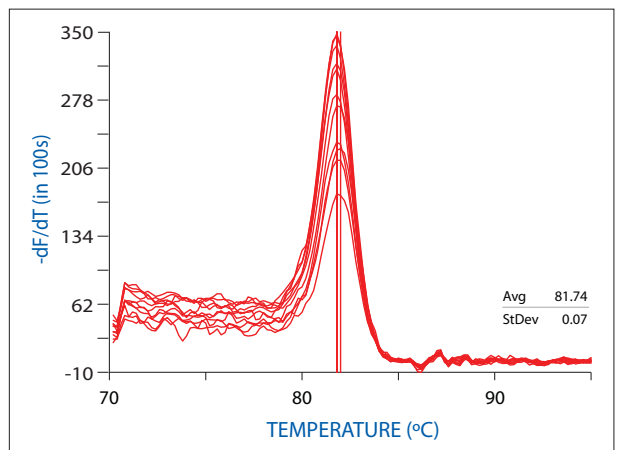
The Spartan DX-12® is a 12-well thermal cycler with optical detection capability that is designed for low throughput PCR applications. It is portable, light-weight, sensitive and robust with better thermal precision and accuracy than many large real-time PCR instruments. The unit has two optical detection channels (FAM and Texas-Red), melt-curve capability and an easy to use PC-based graphing program.



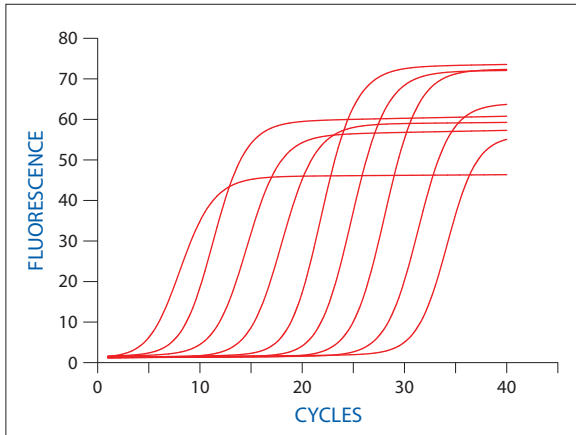
Melt analysis of 12 PCR products across the wells of the Spartan DX-12® indicate smooth melt profiles.

Stop waiting. Start getting DNA results on demand.

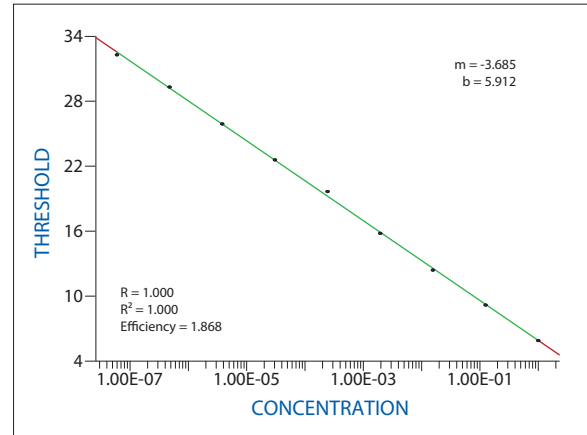
- ↘ 12-well sample capacity & dual-channel detection
- ↘ Performs 2- or 3-temperature PCR programs
- ↘ Small footprint maximizes bench space
- ↘ Built-in Reverse Transcription (RT) program for RNA analysis
- ↘ Compatible with leading reagents and kits



Melt-peak Tm Analysis across the 12 wells of the Spartan DX-12® indicates excellent Tm precision.



Serial dilutions run with the Spartan DX-12® indicate a 7 (±) log dynamic range.



The Spartan DX-12® can display and produce quantitative real-time PCR results.

DX-12 Specifications

TECHNICAL / OPTICAL	
Sample capacity	↘ 12 wells x 25µl Spartan PCR tubes
PCR modes	↘ 2-temperature or standard 3-temperature programs
Detection modes	<ul style="list-style-type: none"> ↘ End point (first and last cycle) ↘ Real-time (with appropriate license) ↘ Qualitative (Yes/No - based on fluorescence cut-off) ↘ Quantitative (0.5 Log sensitivity) ↘ 2-channel detection (Excitation Green: 471-492 nm / Red: 555-584 nm) (Emission Green: 520-532 nm / Red: 620-800 nm)
Detector	↘ 10-bit CMOS Camera
Features	<ul style="list-style-type: none"> ↘ Melt Curve Analysis: 1.0°C - 0.1°C increments (with appropriate license) ↘ Reverse Transcription (RT) for RNA analysis
Data storage and transfer	↘ USB flash drive / SD MMC F
Operational requirements	↘ Built-in LCD display and keypad. No external computer required. Standard PC with available USB port required for data transfer and analysis.
Ease of use	↘ Simple menus and user interface. Learn to use it in 10 minutes.
Optimized run times	↘ 30 minutes - 90 minutes
Graphing software	↘ Spartan graphing and analysis software [included].
Reaction tubes	↘ Spartan tube with excellent thermal and optical performance.
COMPATIBLE FLUOROPHORES	
Channel 1	↘ Fluorophore: FAM/SYBR®* Green – Quencher: BHQ-1®
Channel 2	↘ Fluorophore: Cal Fluor® 610/Texas Red/ROX – Quencher: BHQ-2®

*This product is not licensed under U.S. Patent Nos. 6,174,670 and 6,658,627, for use of SYBR Green® I in PCR. Users interested in obtaining a license for these patents should contact Idaho Technology, 390 Wakara Way, Salt Lake City, UT 84108, 801-736-6354, it@idahotech.com.

THERMAL MODULE	
Temperature Precision (°C) (3 min after start reaching set temperature)	↘ ±0.05
Temperature accuracy (°C) (30 seconds after start)	↘ ±0.5
Temperature uniformity (°C) (30 seconds after start)	↘ ±0.5
Ramp rates (°C/s)	↘ Avg. 60 - 90°C: 3.0 heating, 2.5 cooling
Peak ramp rates (°C/s)	↘ 8.5
Warm-up time from ambient start	↘ 5 minutes
ENVIRONMENT	
Operating temperature	↘ 20 - 25°C
Relative humidity	↘ 20 - 50% noncondensing
Operating altitude	↘ 0 - 2000 meters
Operating environment	↘ Indoor use only
Installation category	↘ II
Pollution degree	↘ 2
SYSTEM	
Dimensions / Weight	↘ Small footprint ↘ 17(W) x 36(D) x 12(H) cm / 4.2 kg [6.69"(W) x 14.17"(D) x 4.72"(H) / 9.3 lbs]
Voltage Requirements	↘ 100 - 240 V, 50 - 60 Hz
Power Consumption	↘ 12VDC, 6.5A, 100W. DIN-8 Connector (female)
Package contents	↘ Instrument, User manual, USB Flash Drive, 12V power supply, 1 accessory kit (consists of centrifuge adaptors, set-up rack, starter pack of tubes), CD with Graphing Software

↘ Accessories

High Performance Tube & Cap



Tube Rack & Centrifuge Adaptors



Higher Productivity Rapid Diagnosis