

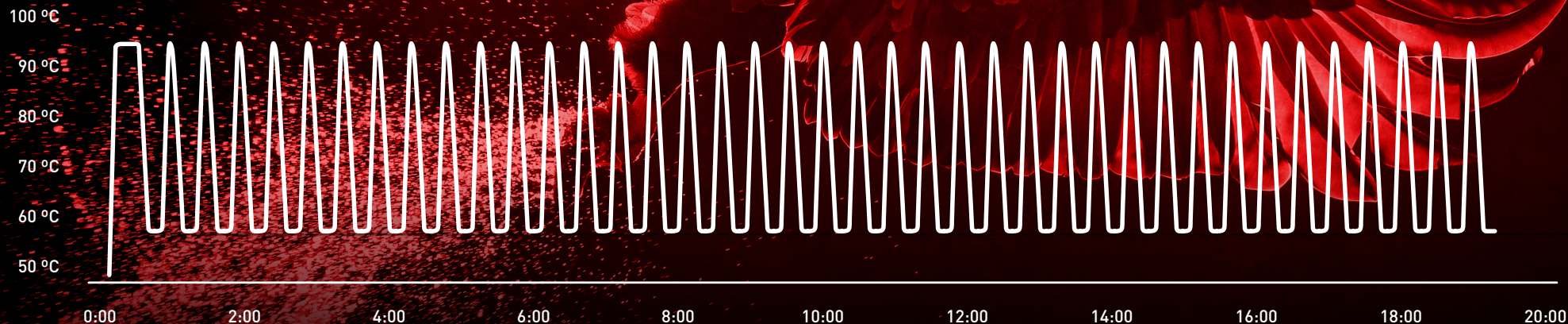
Your Personal Real-Time PCR Machine



Open qPCR Single + Dual Channel

INSANELY FAST

Perform 40 cycles of PCR in 20 minutes
with 5 °C/s heating and cooling rates

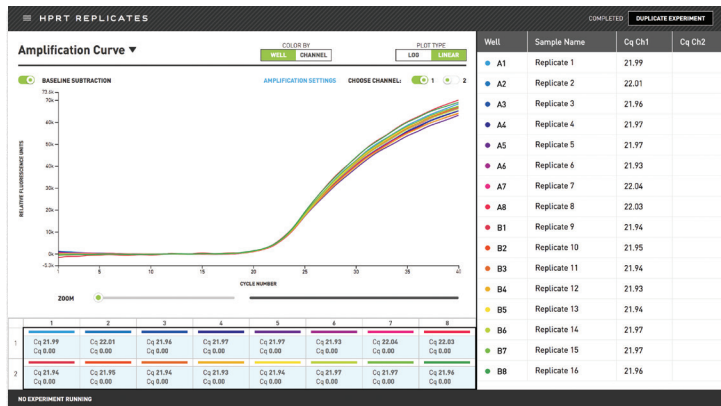


BUILT LIKE A TINY TANK



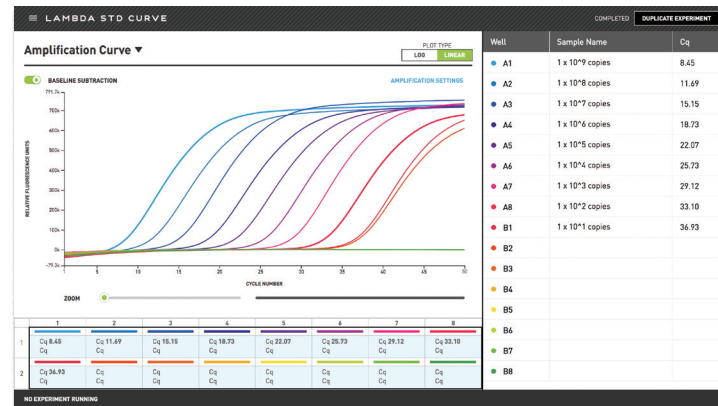
Compact, portable, and rugged;
Open qPCR is at home in the lab,
factory, or field.

Consistent results. Every time.



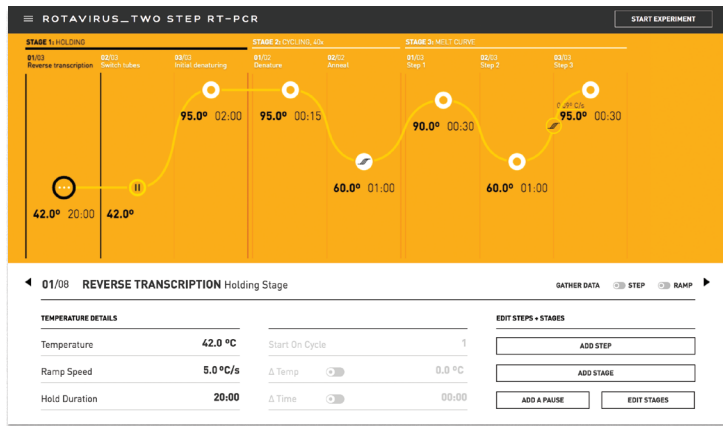
Thermal control so precise that results can be directly compared across runs, eliminating the need to repeatedly generate standard curves.

Sensitive enough to detect a single copy, robust enough to detect billions.



Quantify samples the first time with 9 orders of magnitude of dynamic range.

Simple design. Advanced experiments.



Design sophisticated experiments with Touchdown PCR, High Resolution Melt (HRM), Reverse Transcription PCR, and more.

PCR without a Ph.D.

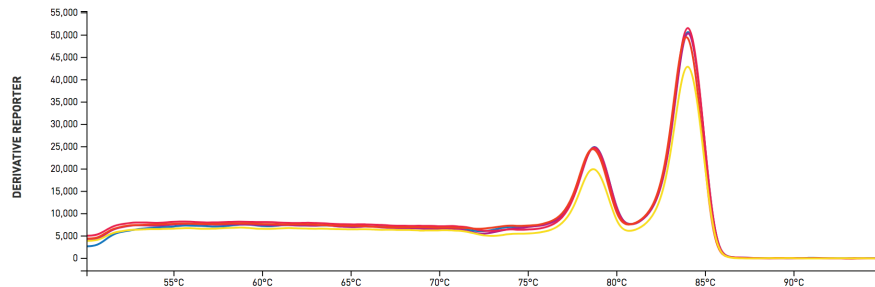
Experiment:

LP Screening (12 beer spoilers)

Well	Cq	Results	Amount
A1. Positive Control	✓ 23.18	Valid	—
A2. Negative Control	✓	Valid	—
A3. Fermenter 1	⊕ 19.00	Positive	High
A4. Fermenter 2	⊖ —	Negative	Not Detectable
A5. Fermenter 3	⊙ —	Inhibited	Invalid
A6. Keg 34627	⊕ 28.03	Positive	Medium
A7. Keg 34756	⊖ —	Negative	Not Detectable
A8. Incoming Hops QC	⊕ 31.40	Positive	Low

With test kits, step-by-step wizards, and automated analysis, anyone can get clear results.

Powerful Analysis

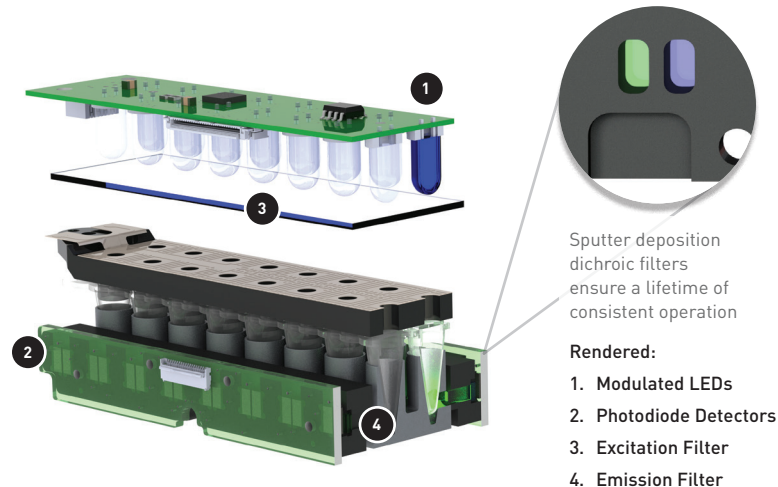


2 Channel Multiplexing *
Color Compensation *
Baseline Subtraction
Adjustable C_q and T_m Calling

Generate Standard Curves *
Melt Curve Analysis
High Resolution Melt (HRM) *

* - requires dual channel model

Precision Optics



Solid-state optics read 16 samples in four seconds, allowing fast protocols & rapid acquisition of high-resolution melt curves. All without a single moving part.

System	
Samples:	16 wells
Tubes/Strips:	100 µL low-profile
Sample volume:	10 – 50 µL
Sensitivity:	1 copy
Dynamic Range:	10 ⁹
Dimensions:	11 x 9.5 x 7.5 inches (28 x 24 x 19 cm)
Weight:	9 lbs (4 kg)
Approvals:	FCC, CE

Power	
Voltage:	100 – 240 V
Frequency:	50 – 60 Hz
Average Power:	75 W
Peak Power:	350 W*

*Peak power can be limited to 125 W by limiting ramp speed to 1 °C/s for battery operation

Thermal	
Temperature Range:	4 – 100 °C
Ramp Rate:	0.00001 – 5 °C/s
Temperature Accuracy:	±0.2 C at 65 °C
Temperature Uniformity:	±0.4 C at 65 °C
Lid Temperature:	Ambient – 120 °C
Design:	Dual Peltiers

Connectivity		Operating Environment	
Networking:	Ethernet, 802.11n WiFi, USB	Temperature:	10 – 35 °C
Touchscreen:	5.0 inch, capacitive	Humidity:	20 – 80% non-condensing
Software:	HTML5/JavaScript Web App	Max Altitude:	2,000 m
Device Support:	PC, Mac, iPad, Android Tablet		
Integration:	REST API		

Optical	
Excitation:	454 – 487 nm
Detection:	513 – 555 nm (single); 508 – 532, 573 – 597 nm (dual)
Fluorophores:	Chai Green, SYBR Green, FAM, HEX, VIC, JOE
Scan time:	4.4 s
Design:	Solid-State LEDs & Photodiodes

Widely Compatible

Open qPCR has been validated with Chai’s PCR Master Mixes and mixes from other leading manufacturers. The instrument is compatible with all dye and probe-based chemistries utilizing Chai Green, SYBR Green, FAM, HEX, VIC, or JOE fluorophores.

Featured Products	
Instruments	Open qPCR, Single or Dual Channel
Service Plans	Two, Three, and Five-Year Plans available
Accessories	PCR Tube & Cap Strips, 100 µL
	Single/Dual Channel Calibrators
DNA/RNA Extraction Solutions	Chai One-Step DNA/RNA Extraction Buffer
	Chai Enzymatic DNA/RNA Extraction Buffer
PCR Master Mixes	Sahara Universal qPCR Master Mix
	Chai Green qPCR Master Mix
	Sahara Multiplex qPCR Master Mix
	Sahara One-Step RT-qPCR Master Mix
	Sahara One-Step RT-qPCR Master Mix with UNG
	Sahara Hot Start PCR Master Mix



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