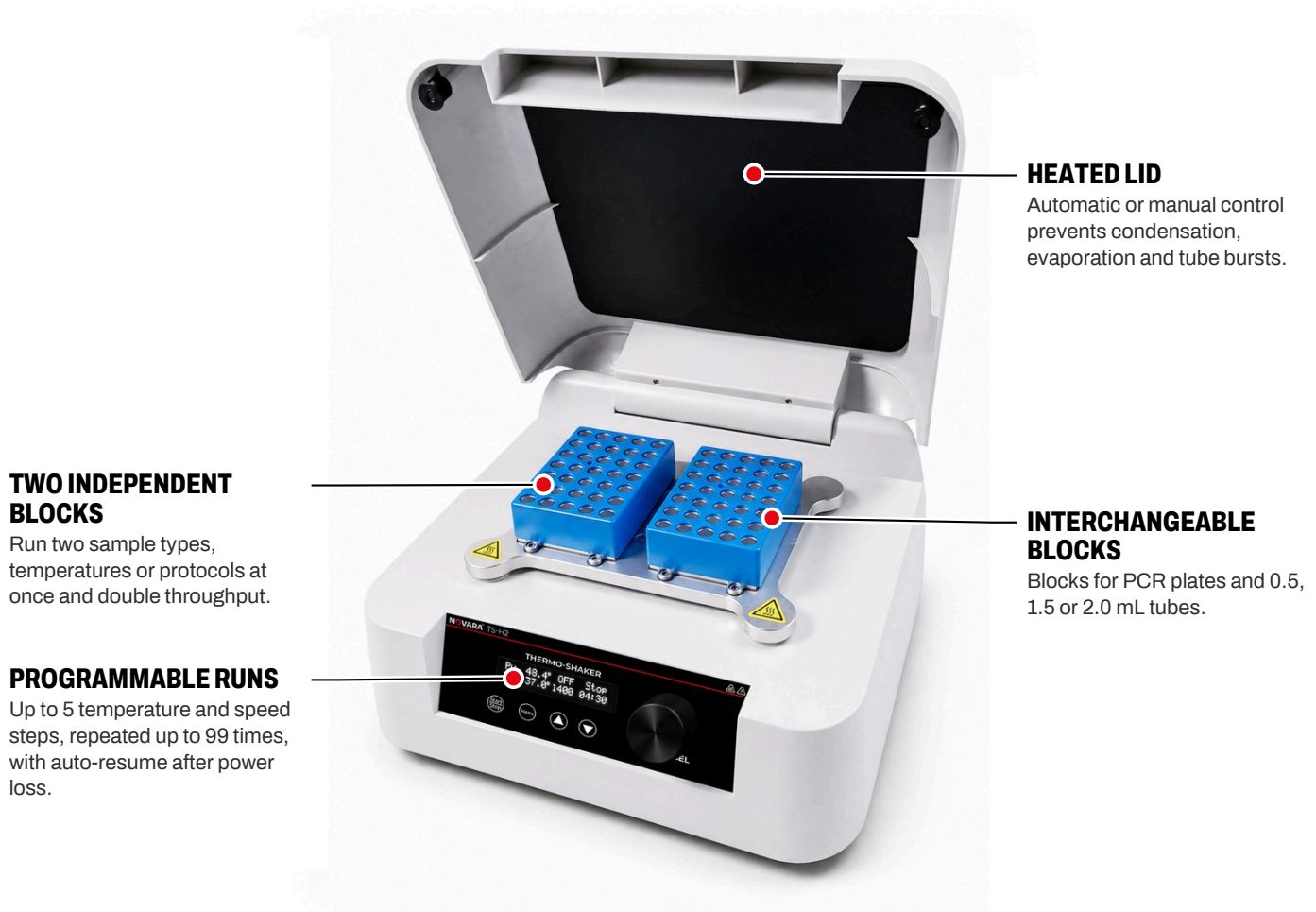


DUO THERMO-SHAKER WITH TWO INDEPENDENT BLOCKS

Two heating and shaking blocks in one unit, each with its own temperature, speed and time, so two protocols can run side by side.

**HEATED LID**

Automatic or manual control prevents condensation, evaporation and tube bursts.

TWO INDEPENDENT BLOCKS

Run two sample types, temperatures or protocols at once and double throughput.

INTERCHANGEABLE BLOCKS

Blocks for PCR plates and 0.5, 1.5 or 2.0 mL tubes.

PROGRAMMABLE RUNS

Up to 5 temperature and speed steps, repeated up to 99 times, with auto-resume after power loss.

±0.2°C AT 37°C

Accuracy and uniformity of ±0.2°C or better at 37°C, with PID control.

FAST HEAT-UP

Reaches 100°C from 25°C in 15 minutes or less.

2MM ORBIT

200 to 2,000 rpm on both blocks.

AUTO-RUN

Starts once the blocks reach temperature.

DUAL PROTECTION

Two levels of over-heating cutoff.

2 independent

BLOCKS

RT+5 to 100°C

TEMPERATURE

200–2,000 rpm

SPEED

±0.2°C at 37°C

ACCURACY

TWO THERMO-SHAKERS IN ONE FOOTPRINT

The Novara Duo is a benchtop thermo-shaker with two independent heating and shaking blocks. Each block has its own temperature, speed and time, shown on one LCD.

A brushless DC motor drives a 2mm orbit from 200 to 2,000 rpm. PID control holds $\pm 0.2^{\circ}\text{C}$ at 37°C , and a heated lid clamps over both blocks to keep tubes sealed and dry.

Auto-preheat, auto-run and dual over-heating protection make it easy to set up and safe to leave running.

TWO PROTOCOLS, ONE FOOTPRINT

Run an incubation on one block and a digestion on the other at different temperatures and speeds, without waiting for the first to finish.

SET UP ONCE, RUN AGAIN

Save five-step programs with up to 99 cycles, and auto-preheat brings the blocks to temperature before samples go in.

APPLICATIONS

PCR and sample prep, DNA/RNA extraction, enzyme reactions, cell culture and screening.

SPECIFICATIONS

Blocks	2, independently controlled
Temperature range	RT+5°C to 100°C
Accuracy, uniformity	$\pm 0.2^{\circ}\text{C}$ at 37°C
Heat-up, 25 to 100°C	15 min or less
Speed range	200–2,000 rpm
Orbit	2mm
Timer	1 min to 99 h 59 min, or continuous
Programs	5 steps, up to 99 cycles
Safety	Dual over-heating protection
Power	450 W
Voltage	110V, 60Hz
Dimensions (L x W x H)	13.4 x 12.6 x 7.9 in
Weight	23.6 lb

ORDERING INFORMATION

Catalog no.	Description
TS-H2	Novara TM Duo Thermo-Shaker, two blocks

COMPARE NOVARA THERMO-SHAKERS

	TS-H	TS-HC	TS-H2
Blocks	1	1	2, independent
Temperature range	RT+5 to 100°C	RT–30 to 100°C	RT+5 to 100°C
Speed range	200–1,800 rpm	200–1,500 rpm	200–2,000 rpm
Orbit	3mm	3mm	2mm
Accuracy	$\pm 0.3^{\circ}\text{C}$	$\pm 0.3^{\circ}\text{C}$	$\pm 0.2^{\circ}\text{C}$ at 37°C