

TECHNICAL DATA SHEET

ALab™ TC1000-G-Pro & TC1000-S+ Gene Amplification Instruments

Gene Amplification Instruments · 7-inch touch panel · 1×96 block · 0–105 °C



ALab™ TC1000-G-Pro & TC1000-S+ Gene Amplification Instruments

The ALab™ TC1000 series thermal cycler. Image shown for reference.

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SECTION I

Product Overview

The ALab™ TC1000-G-Pro and TC1000-S+ gene amplification instruments are specially designed for PCR optimization, with a brand new UI and color touch panel, high-performance and long-lasting Peltier refrigeration and heating, and edge temperature compensation technology for excellent temperature uniformity.

Both models have a 1×96 module, a 0–105 °C sample module range and USB and WIFI interfaces. The TC1000-G-Pro adds a gradient setting range of 30–105 °C and supports Touchdown PCR and Long PCR.

SECTION II

Core Advantages

- **Touch panel** — 7-inch LCD, new UI
- **Block** — 1×96, 0–105 °C
- **Gradient** — TC1000-G-Pro, 30–105 °C
- **Hot cover** — settable mode, auto off
- **Rapid incubation** — one-click function
- **Interfaces** — USB, WIFI

SECTION III

Specifications

Technical data — TC1000-G-Pro · TC1000-S+

Specifications	
Brand	ALab™ by ACS Material
Model	TC1000-G-Pro, TC1000-S+
SKU #	ALTC1000
Product Type	Gene amplification instrument (thermal cycler)
Display	7-inch LCD touch panel, 1024×600
Sample module temperature control range	0–105 °C
Gradient temperature setting range	TC1000-G-Pro: 30–105 °C
Communication interface	USB, WIFI

Specifications by model — TC1000-G-Pro · TC1000-S+

Specifications by model		
Parameter	TC1000-G-Pro	TC1000-S+
Sample Capacity	96×0.2mL PCR tube; 12×0.2mL PCR-8 strips; 1×0.2mL 96-well PCR plate	96×0.2mL PCR tube; 12×0.2mL PCR-8 strips; 1×0.2mL 96-well PCR plate
Module	1×96	1×96
Sample module temperature control range [°C]	0–105	0–105
Hot lid temperature control range [°C]	30–115	30–115
Temperature display accuracy [°C]	0.1	0.1
Temperature control accuracy [°C]	±0.1	±0.1
Temperature uniformity (at 55 °C) [°C]	±0.2	±0.2
Maximum rate of temperature change	5 °C/Sec	5 °C/Sec
Gradient Temp Setting Range [°C]	30–105	–
Gradient span [°C]	1–42 °C, enter 0 to turn off the gradient	–
Temperature Control Method	Block/Tube	Block/Tube
Material of the carrier module	Aluminum	Aluminum
Display	7 inches, LCD 1024×600	7 inches, LCD 1024×600
Input method	Touch panel	Touch panel
Power off protect	Yes	Yes
Communication Interface	USB, WIFI	USB, WIFI
Number of program storage	20000+ (USB FLASH)	20000+ (USB FLASH)
User Defined File System	Up to 30 steps and 99	Up to 30 steps and 99
Power Supply	100–120V/200–240V, 50/60HZ, 600W	100–120V/200–240V, 50/60HZ, 600W
Dimensions [WxDxH]	296×370×295mm	296×370×295mm
Weight	9.5Kg	9.5Kg
Permissible Ambient Temperature and Humidity	5–40 °C, 80%RH	5–40 °C, 80%RH

SECTION IV

Applications

The TC1000-S+ and TC1000-G-Pro are basic instruments in molecular laboratories, widely used in gene detection, molecular cloning, gene expression, mutagenesis and other fields, involving drug discovery, agriculture and the food industry.

Product value: a 7-inch color touch panel, Peltier heating and cooling with edge temperature compensation, hot cover settings, one-click rapid incubation, USB and WIFI interfaces; the TC1000-G-Pro adds gradient settings. Select the model before ordering.

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