NANOTEMPER

Prometheus™ Panta Site Preparation Guide

History of changes

Version	Date	Reason(s) for Change
V1.0	2026/07/16	New Document

Contents

This document provides a guide and checklist to support the installation of Prometheus™ Panta*. If your site does not meet these specifications, please contact your NanoTemper representative to reschedule the installation.*

1. Instrument Installation Prerequisites

PARAMETER	SPECIFIED RANGE
Instrument Acclimatization	15 – 30 °C, 20 – 70 % RH (non-condensing) for at least 24 hours prior to installation
Ambient Temperature	15 – 30 °C
Ambient Humidity	20 – 70 % RH, non-condensing
Altitude	Maximum 2,000 m above sea level
Atmospheric Pressure	800 – 1060 hPa
Sunlight	No direct exposure to sunlight
Available bench space	Indoor, horizontal and stable position Minimum free area of 100 cm x 70 cm x 60 cm (WxDxH) Minimum bearable weight of 35 kg
Accessibility	All power switches are easily accessible Capillary Tray Gate and Cooling Fans are not blocked
Exposure to magnetic or HF fields	No exposure to strong magnetic fields or sources of high frequency
Exposure to vibrations	No exposure to vibrations originating from sources like vacuum pumps, centrifuges, electric motors etc.
Exposure to dust or corrosive gases	No exposure to dust or corrosive gas
Exposure to air streams	No direct exposure to air streams of any cooling or heating device.
Supply Voltage & Frequency	90 – 264 VAC ± 10 %, 47/63 Hz
Power Rating	230 VA max.
Power sockets	Minimum 2
Ethernet socket (if LAN connection is required)	Minimum 1

2. Workstation Minimum System Requirements

NOTE	*This section may be skipped if the workstation provided with the shipment with the* Prometheus™ Panta *instrument is being used. The onboard ethernet adaptor of the laptop will be used to communicate with the instrument. A WIFI adaptor* ***OR*** *the provided USB-C to LAN adaptor can be used to connect tor network.*

PARAMETER	SPECIFIED RANGE
Operating System (OS)	Windows 11 (64-bit) or higher
CPU	12th Gen Intel Core i5 / AMD Ryzen 5 (5000 series) or better
RAM	Minimum 8 GB
Hard Drive	Minimum 20 GB free space
Display Resolution	1920 x 1080 or better
Software	Microsoft.NET 4.7.0 & Microsoft.NET Core 3.1
Network	1x 1000 Mbit RJ45 Ethernet Port (Device) 2x USB-A for Ethernet adapter (Mouse, Network adapter)
Windows Locale	US-EN

3. Appendix

3.1 Specifications

Input external Power Supply: 90–264 VAC ± 10 % 47–63 Hz, 230 VA max
Output external Power Supply: 24 VDC, 11.67 A max

Electrical input Prometheus™ Panta instrument: 24 VDC, 10A

Environmental
Operating temperature 15 – 30 °C (Indoor use only)
Humidity 20–70 %, noncondensing
Operating altitude max 2,000 m

Prometheus™ Panta dimensions
Width 35 cm (13.8”)
Height 51 cm (20.8”)
Depth 55 cm (20.5”)
Weight 35 kg (77 lbs) net

Power supply size
Width 21 cm (8.3”)
Height 9 cm (3.5”)
Depth 3 cm (1.1”)
Weight 0.5 kg (1.1 lbs) net max

DLS laser
Wavelength: 405 nm +/- 5 nm
Power: 100 mW max.

Prometheus Panta Laser classification: The device is LASER PRODUCT CLASS 1

Temperature control
Range: 15 °C- 110°C (at Room Temperature 25 °C)
Accuracy: +/- 0.1°C

Noise level of Prometheus instrument: **max. 64 dB(A)**

3.2 Safety consideration

NanoTemper Technologies instrument systems and their components should only be handled by trained staff. Please consult the relevant user manuals to learn about potential hazards and risks before use. If the system shows any signs of damage, stop operation and contact NanoTemper Technologies GmbH.

Do not modify the system in any way. Do not use it for anything other than its intended purpose.

To ensure operation safety, this instrument must be operated correctly. Carefully read the following explanations to fully understand all safety precautions in this manual before operating the instrument. Please take a moment to understand what the signal words **WARNING!, CAUTION** and **NOTE** mean in this manual.

Safety symbols

WARNING!	A **WARNING!** indicates a potentially hazardous situation which, if not avoided, may result in serious injury or even death.
CAUTION	A **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. **CAUTION** may also be used to alert against damaging the equipment or the instrument. Do Not proceed beyond a **WARNING!** or **CAUTION** notice until you understand the hazardous conditions and have taken appropriate steps.
NOTE	A **NOTE** provides additional information to help the operator achieve optimal instrument and assay performance.
	Read user manual label. This label indicates that you have to read the user manual before using the instrument. This label is positioned at the back of the device.
	Warning symbol. This symbol indicates a surface that can heat up and cause burn injuries. This warning label is positioned on the sample tray.

Warning symbol. This symbol indicates a possible risk for hand injuries by crushing and sharp edges. This warning label is positioned on the sample tray.

Identification label. This label is positioned at the rear panel of the device.

CAUTION The Prometheus Panta has to be installed in a way that does not hinder access to the external power supply and its power plug.

CAUTION Connect the Prometheus Panta instrument power supply in a way that avoids tripping hazards.

CAUTION Do not use extension cords. Damaged cords, plugs or cables need to be replaced immediately. Failure to comply may result in a risk of personal injury or damage to the instrument.

CAUTION Do not operate the Prometheus Panta instrument with a power supply other than the one delivered by NanoTemper Technologies.

WARNING! Connect the Prometheus Panta to the AC power supply using the supplied power cable. The AC power supply, which is connected to the Prometheus Panta, must only be connected to an outlet that has a ground contact, since the instrument is assembled in line with the specifications for safety class IEC 61010-1:2010.

WARNING! Danger of electric shock, fire and skin burns. Do not open the system (other than operating the door via the software). Do not reach into the door opening.

WARNING! Do not operate the Prometheus Panta instrument with substances or under conditions that pose a risk of explosion, implosion or release of gases. Do not use the instrument with hazardous or infectious substances.

CAUTION Use only aqueous samples for analysis in the instrument.

CAUTION The Prometheus Panta instrument weighs approx. 35 kg. Two people are required for transport. Moving the instrument alone entails a risk of personal injury or damage to the instrument.

CAUTION Do not open the instrument manually or anywhere other than the sample loading drawer. Opening entails a risk of personal injury or damage to the instrument and may only be done by NanoTemper Technologies staff.

CAUTION Only NanoTemper Technologies staff may service the instrument. Turn off the power switch and unplug the power cord before servicing the instrument, unless instructed otherwise.

CAUTION The instrument contains a UV-LED. The UV-LED emits invisible ultraviolet radiation (UVB radiation) when in operation, which may be harmful to eyes and skin, even at brief periods of exposure.

Do not look directly into the UV-LED during operation. If used as intended, the instrument emits no UV radiation.

CAUTION Mechanical moving parts within the instrument can pinch or injure your hands or fingers. Do not touch or open the instrument while parts are moving. Do not reach into the opening when the door is open.

CAUTION The display pane is made of glass. Broken glass can injure your hands or fingers.

CAUTION The sharp edges of the Prometheus Panta thermal element pose a risk of injury to hands and fingers.

CAUTION The instrument contains a temperature regulator to control the sample temperature. Some accessible parts of the instrument can reach temperatures of up to 60 °C. Don't touch the temperature-controlled parts of the instrument when the temperature controller is set to high temperatures.

CAUTION Do not use the instrument at ambient temperatures below 15 °C.

CAUTION Use the instrument only at noncondensing conditions (20-70 % humidity, 15-30 °C). At very high humidity levels, even normal operating temperatures may result in condensation and corrosion.

CAUTION Turn off the instrument when not in use.

CAUTION Do not use 100% ethanol or other types of organic solvents to clean the instrument as they may remove the instrument paint.

CAUTION The instrument contains a laser module (visible laser radiation class 3B according to IEC 60825-1: 2014). Lasers or laser systems emit intense, coherent electromagnetic radiation that has the potential of causing irreparable damage to human skin and eyes. Direct eye contact can cause corneal burns, retinal burns, or both, and possible blindness. Do not attempt to open the instrument as this poses a risk of personal injury or damage to the instrument. When the instrument is used as intended it emits laser radiation of LASER CLASS 1.

CAUTION Remove loose parts (capillaries and capillary lid) before transport as they may damage the measurement optics

CAUTION The heating element contains nickel. If allergic to nickel wear protective gloves when cleaning the tray surface to avoid skin irritation and damage.

CAUTION If liquids penetrate the instrument, for example due to spillage, stop operation of the instrument, disconnect it from the power supply and contact NanoTemper Technologies GmbH.

NOTE Insufficient air supply can cause overheating of the system. Assure enough air supply by not covering or obstructing the back of the system.

NOTE Do not install the instrument in a location where it may be exposed to direct sunlight.

Contact

NanoTemper Technologies GmbH

Tölzer Str. 1

81379 München

Tel.: +49 (0)89 4522895 0

Fax: +49 (0)89 4522895 60

support@nanotempertech.com

nanotempertech.com