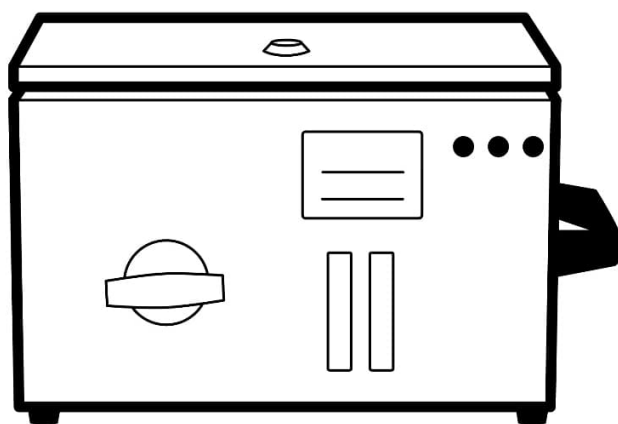




PSS Base & PSS Plus

Instruction and Operating Manual



v.E.1.13

Warranty Statement

This warranty applies to the Gasmet brand name products sold with this warranty statement. This warranty is applicable in all countries and may be enforced in any country where Gasmet Technologies Oy or its subsidiaries or its authorized service providers offer warranty service subject to the terms and conditions set forth in this warranty statement. The warranty period varies by product, check the warranty period, if necessary.

Gasmet Technologies Oy and its subsidiaries guarantee that all products manufactured and sold by it are free of defects in materials and workmanship under normal use during the warranty period.

The products of Gasmet Technologies Oy and its subsidiaries are manufactured using new materials or new and used materials equivalent to new in performance and reliability. Spare parts may be new or equivalent to new.

Gasmet Technologies Oy and its subsidiaries agree to either replace or repair free of charge (Ex Works Vantaa, Incoterms 2020) any such defective product or part that is returned to its repair facility within one (1) year of the delivery date. All parts or products removed under this warranty become the property of Gasmet Technologies Oy or its subsidiaries. The replacement product or part takes on the warranty status of the removed product or part.

The warranty does not extend to any product from which the serial number has been removed or that has been damaged or rendered defective (a) as a result of accident, misuse, abuse, normal wear of components or other external causes; (b) by operation outside the usage parameters stated in the user documentation that is provided with the product; (c) by the use of parts not manufactured by Gasmet Technologies Oy and its subsidiaries; or (d) by modification or service by anyone other than Gasmet Technologies Oy and its subsidiaries.

Gasmet Technologies Oy and its subsidiaries are not liable for any damages caused by the product or the failure of the product to perform, including any loss of profits or savings, incidental damages, or consequential damages.

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1. Introduction

Gasmet PSS Base and Plus are heated portable sampling systems designed for extraction of inorganic and organic gases in various applications such as short-term emission monitoring and material combustion testing.

This manual provides operation instructions for Gasmet PSS Base and Gasmet PSS Plus. Manuals for the GT6000 Mobilis gas analyzer as well as Calcmeter Easy and Calcmeter Expert software complement this manual and are referred to in matters considering the Calcmeter software.

Before starting to operate PSS Base or PSS Plus, read this Instruction & Operating Manual carefully and thoroughly. Improper use of the product may damage the equipment.

If you do not understand something or are unsure what to do, please do not hesitate to contact your local distributor or Gasmet Technologies Oy. The contact information is at the bottom of every page.

Please remember that measuring conditions should be non-condensing. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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2. Technical data

PSS BASE & PSS PLUS TECHNICAL SPECIFICATIONS

Heated sampling train	Set temperature: 50 °C or 180 °C Main components: sample filter, pump, sample lines Materials: Teflon and stainless steel
Sample	Flow: nominal 4 l/min, at ambient pressure Flow alarm value: 2.5 l/min Filtering before PSS (optional probe): Filtration of particulates (2 µm)
Power supply	Separate models for 115 and 230 V / 50 -60 Hz Power consumption: 400 W maximum PSS only, 2400W maximum for heated lines. Maximum for single heated line 2300 W for 230 V version and 1600 W for 115 V version.
Gas fittings	Sample in: 6 mm Swagelok, stainless steel Sample out: 6 mm Swagelok, stainless steel Zero gas and instrument air: Recommended pressure: 2 bar Recommended flow: 4 l/min, PSS Plus: adjustable 0-7 l/min
Enclosure	Dimensions: 420x245x290 mm Material: Steel, Powder Coated Grey IP class: IP42
Weight	16 kg (PSS Plus), 15 kg (PSS Base)
Product compliance	CE, UKCA
Internal heated sample filter	Default: PTFE 2 µm particulate filtration Option: Sintered stainless steel 0.1µ
Oxygen sensor (only in PSS Plus)	Principle: ZrO2 cell Measuring range: 0.1 – 25 % Calibration: Automated single point calibration with air
Optional heated line	Tube size: 4 mm inner diameter, 6 mm outer diameter Core material: Teflon Fittings: 6 mm Swagelok Power supply: Supplied from PSS Power density: 120 watts/meter Maximum total sample line length: 20 m for 230V model, 13 m for the 115V model

OPERATING AND STORAGE CONDITIONS

Operating temperature	Long term -5 to 40 °C, short term -10 to 50 °C
Storage temperature	-20 to 60 °C, non-condensing

3. List of Items Delivered for PSS Base & Plus

The standard PSS includes the following parts:

- > PSS Base or Plus
- > Internal heated sample filter (PTFE)
- > Insulator rings for heated line connections
- > Analyzer to PSS communication cable

The options available are:

- > Heated sample lines
- > PSP4000 portable sample probe with one PTFE probe filter
- > Heated sample probe tube
- > Sample probe carrying case

4. Installation

This chapter describes the requirements and safety precautions considering installation and installation location. When using the sampling system for the first time, perform the inspection described below.

During installation of the PSS Base or PSS Plus, the safety of any system incorporating the equipment is the responsibility of the assembler of the system.



Do not open the PSS case without trained service personnel. PSS contains electric components and heated elements that can cause electric shocks or severe burns.

4.1. Inspection

The product must be inspected within 30 days from the date of delivery, to ensure that the warranty is valid in full. If you noticed that something is missing or the analyzer is damaged during transportation, please contact the nearest distributor or Gasmet Technologies Oy. Before you make this inspection, it is recommended to read this user manual.

1. Check the condition of the shipping box.
2. Check that no items listed in Chapter *List of Items Delivered* are missing.
3. Check visually that the enclosure is undamaged.
4. Check that the product power supply specification and available power supply are matching. Connect the power cable and switch the power on. Follow instructions in chapter 5.
5. Connect to the analyzer and Calcmeter software. Follow instructions in chapter 5.
6. Connect a sample line with appropriate sample probe and filter to *Sample In*. Follow instructions in chapter 5.
7. Verify that the sampling system is warmed up after possible transport to non-condensing temperature internally, before activating the measurement and sample pump

Wait before the sampling system has reached the target temperature. Measure hardware status and check the temperatures. Observe that Status is showing OK. Otherwise wait for the system to fully warm up and stabilize and repeat the hardware status measurement. If you are using PSS Plus, do an oxygen sensor calibration to check that the oxygen sensor works normally. Start a continuous measurement and check that the pump is working (you can hear the pump, gas concentrations are changing inside the sample cell, gas is flowing out of the analyzer sample outlet).

4.2. Lifting and carrying instructions

When operating the sampling system, place it in horizontal position front panel facing the user. Carry the sampling system from the handle. When lifting the sampling system, you can use the main handle and the recessed handle on the opposite side of the sampling system to make lifting easier.

Do not use any carrying equipment that is not approved by Gasmet.

4.3. Storage and Packaging Conditions

The PSS must be stored in a dry and condensation-free place. Gasmet original package must be used to store the equipment.

The following long-term storage conditions should be respected:

- > -20 to 60 °C storage temperature
- > 5 - 95 % relative humidity, non-condensing



Do not drop the PSS even when stored in its original package (wooden box).

Keep the box and packaging materials in case the unit needs to be returned for service.

4.4. Safety precautions

4.4.1. Installation Location



The sampling system must be installed and operated in a dry and condensation-free place. The environment should be clean enough so that no dirt will accumulate on or inside of the sampling system.



The installation location must be preferably free of strong vibrations. Shocks during transport, for example, can cause serious damage. When shipping the instrument, use the transport case with original shock absorbing materials. The transport case is designed to securely accommodate the PSS, the probe, as well as over 5 meters of heated line.



Avoid using the equipment in wet conditions. Limited water proofing to IP42 conditions horizontal operating position (Figure 1). Note that the IP rating is not applicable in other positions, e.g., the carrying position.

The socket outlet to which the power cable is connected shall be in vicinity of the equipment and easily reachable.



Figure 1. PSS in correct operating position.

4.4.2. Ventilation Requirements

Care should be taken to ensure a free convection airflow around the sampling system and avoid fan obstruction when in long term operation. Do not block fans air circulation. This would decrease life expectancy of most of the internal components.

4.4.3. Protective Earthing Instructions

Precautions should be taken so that the protective earthing scheme on the sampling system is not defeated.



Never connect your sampling system to an AC mains socket that has no protective earth.

4.4.4. Power cable connection

The power cable must be connected to a power source with the AC voltage specified in this manual. Do not use with an extension cord or receptacle unless all three blades can be fully inserted to prevent blade exposure. The power cord is appropriate for IP42, but care must be taken that the socket connection is safe when using outside.

Use an uninterruptible power supply (UPS) if the electric power is subject to major disturbances or power failures.

All cautions and warnings on the equipment must be noted. If the equipment is not in use for a long time, disconnect it from the mains to avoid damage from transient over-voltage.



Avoid using the equipment in wet conditions. Limited water resistance in horizontal orientation, according to IP42 conditions.



The AC power supply cord should be routed so that it is unlikely that it will be damaged. If the AC power supply cord is damaged, DO NOT OPERATE THE UNIT!

4.4.5. Sound Level

The highest sound pressure level of the analyzer has been measured at a point 1 m from the enclosure of the equipment and with the sample pump switched on. The maximum sound level is 52 dBA. Many authorities consider sound level created by the PSS Base and PSS Plus as below hazard threshold. Special means, such as the use of protective earpieces, can decrease the sound level for the operator.

4.4.6. Explosion Protection

For your own safety, the equipment must not be used in hazardous areas (EX-rated areas). The standard enclosure is not explosion proof. The equipment should not be used to sample explosive gas mixtures or gases that might form an explosive gas mixture with the ambient air.



Gasmet Technologies Oy assumes no responsibility if PSS Base or PSS Plus is used in hazardous areas.

5. Setup and operation

This chapter provides instructions for setup of software and sampling system, and basic operation of the sampling system. Please refer to Calcmet Easy and Calcmet Expert manuals for further instructions on the use and features of the software. Please refer to GT6000 Mobilis manual for further instructions on the use of the analyzer.



Make sure to use heated line with correct temperature sensor. If wrong type is used, heated lines can overheat. For example, using heated line with Pt100 temperature sensor with thermocouple settings may cause overheating. Thermocouple sensors are set as a standard and sensor settings are set in production based on the given configurations and can be changed during the service.

5.1. Connecting sample lines

There are four gas inlet/outlet fittings in PSS Plus and three in PSS Base. All the fittings are 6 mm Swagelok fittings. Connect sample inlet tubing from probe to the *Sample in*, nitrogen for background measurement to *Zero gas*, sample outlet to *Sample out* and the other end to analyzer *Sample in*, and instrument air (only in PSS Plus) to the *Instrument air* connection. If you are using PSS Plus but do not have instrument air, connect nitrogen to both *Zero gas* and *Instrument air*. Instrument air acts as flush gas and safety air: in case of a power cut, instrument air will flow through the measurement system to flush out sample gas.



To connect a line to the Swagelok fittings, make sure that your line has the right size Swagelok fittings, and screw it in place. Secure the line in place with the strap in the line holder. Place insulator rings around the fitting of heated lines to prevent cold spots. Use the compression straps as shown in Figure 2.

Make sure that used heated lines have correct wire order before connecting heated line power cables. Wrong connection can cause circuit board malfunction, check correct wire order from chapter 7.2.2.



Figure 2. Correctly attached heated lines and insulator rings.

Connect zero gas and instrument air to the respective gas inlets in the PSS and adjust the flow. Recommended flow rate for both zero gas and instrument air is 4 l/min and recommended pressure 2 bars. If you are using PSS Plus, use the embedded rotameters on the front to check the flowrate. When using the PSS Base, use a regulator with rotameter before the zero gas inlet.



Note that the Sample In and Sample Out gas fittings are hot when the sampling system is warming up, operated and cooling down.

5.2. Connecting signal and power cables

To establish communication between sampling system and analyzer, plug the communication cable to PSS communication port in your GT6000 Mobilis analyzer, and to the *Communication* port of your PSS.

5.3. Switching the power on

- > Prior to switching on the sampling system's power, make sure that all gas connections, sample lines, power cables, and signal cables are connected correctly.
- > Check that the product power supply specification and available power supply are matching.
- > Before the system is switched on, make sure that that N₂ (or instrument air in the PSS Plus) is flowing. Never let the sample gas enter the cold sampling system!
- > The main power switch is located on the back panel of the sampling unit, see Figure 9 Switch the power on. Check that all parts of the system are working. If some parts are still shut down, switch main power off, check the power connections.
- > After switching the power on, the system starts to heat up to the target temperature. The normal stabilization time to operation temperature is 30-45 minutes.
- > Follow the *System status* light on the front side of the sampling system. The light is yellow when the system is warming up, and red in case of an error. In case of red light, check Calcmeter software for errors messages. The sampling system is ready for measurements once the *System status* light turns green. *System status* light starts to blink when pump turns on.

5.4. Sample pump operation

Sample pump starts automatically when the following conditions are fulfilled:

1. the sampling system is connected to the analyzer
2. analyzer to PC/tablet
3. continuous measurement is started from Calcmeter
4. the system has reached the target temperature.

The pump stops automatically when measurement is stopped. Sample pump can be manually started from the *Manual pump* button on the front side of the portable sampling unit. Sample pump should not be started before the target temperature of the portable sampling system has been reached. If there are any temperature alarms, pump does not start, but safety gas flows (in PSS Base, nitrogen, in PSS Plus, instrument air).

5.5. Configuring PSS settings in Calcmeter

To access the PSS settings in Calcmeter Easy, go to *Menu* and select *Configuration settings*. Then go to *GT6000* tab.

When using PSS Base or PSS Plus, select the correct identification from the *Analyzer Type* drop down list and press *Update*.

Select the heated line *on* or *off* based on your system configuration. In *off* mode PSS don't recognize the heated line and it won't heat up. In case of a heated line with external power source, select *off* mode. After selecting *on* or *off*, press *Update* to save changes.

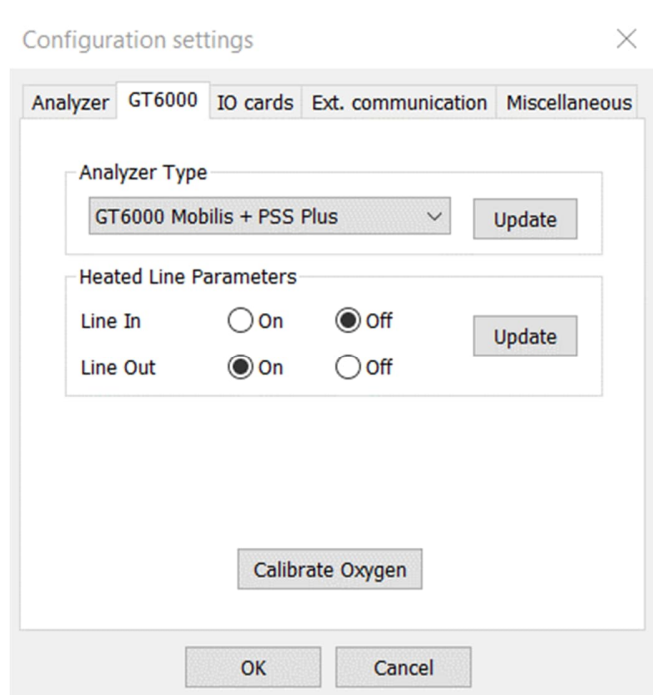


Figure 3. PSS Configuration settings.

5.6. Calibrating the oxygen sensor (PSS Plus)

1. Let the temperature of the sampling system stabilize to 180 °C
2. Connect sampling system to analyzer with cable and analyzer to Calcmnet software.
3. Make sure heated lines and probe is connected to PSS and that probe is out of stack.
4. Go to Calcmnet software on your laptop/tablet and select *Calibrate Oxygen*.
5. Pump turns on and the sampling system is flushed with air and O₂ sensor calibrated, process will take approximately 1.5 minutes.
6. if calibration is successful, it is indicated in *System Log* (Figure 4).

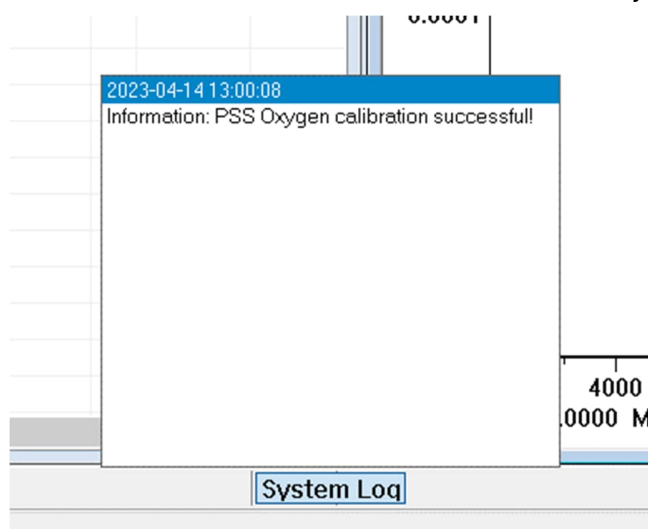


Figure 4. Successful oxygen calibration.

7. In case of unsuccessful calibration, an error message will appear in the log. Refer to Calcmeter software user manuals for more information on error messages.
8. Substantial hydrocarbon concentrations (~1000 ppm) may cause the sensor to malfunction due to the carbon deposit.

5.7. Selecting sample gas or zero gas

A solenoid valve controls the flow of zero gas, and the pump controls the flow of sample gas. This valve is controlled by the Gasmet gas analyzer and alternatively by the manual mode button in the front of the portable sampling system.

When the sampling system is in automatic operation mode the valve stays open in the zero gas position. However, the valve will close if the gas analyzer is in continuous measurement mode and the temperatures in sampling system and heated lines are above the alarm limits.

When the sampling system is in the manual mode and the system temperatures are above the alarm limits, the valve stays closed. The sample pump is on regardless of commands from the gas analyzer.

When the sampling system is used in conjunction with the gas analyzer, it should always be in the automatic mode. Please note that also in manual mode the sample line will not open if the temperatures are below alarm limit and the zero-gas line will automatically open when temperatures drop or the sampling system loses power. **Before using the manual mode, make sure that the sample cell is hot.**

5.8. After the measurements

Before you switch off the portable sampling system, flush thoroughly the whole system with nitrogen (if you are using PSS Base) or instrument air (if you are using PSS Plus). Before flushing the system with Nitrogen or instrument air, it is advisable to detach the probe from stack and pump clean air through the unit for three minutes. After that, turn the pump off; rest of the PSS, heated line, and the sample cell are flushed with nitrogen gas.

Make sure that the whole system is free of sample gas before switching the power off!

6. Sampling system safety and maintenance

This chapter describes the maintenance plan and instructions for the maintenance. Proper handling and damage prevention are also explained. Read these instructions carefully to keep your sampling system in good condition.

6.1. Damage prevention

Improper handling of any components inside the sampling system may damage it. Thus, adjustment of any components inside the sampling system voids the warranty. Any service operations that require opening the case of the sampling system should be performed only by a trained service personnel. The case should only be opened when the sampling system is turned off, AC power cord and the gas lines are disconnected/removed.

The user should pay attention to the following points:

- > Every time after the measurements, the sampling system should be carefully flushed with nitrogen gas or dry instrument air. If corrosive gases remain in the sampling system, it can be damaged. Moreover, immediately after sample gas measurements, pump ambient air through the entire system (including probe and sample lines), at least for 10 minutes, until concentrations have gone back down. After ambient air flushing, flush the analyzer and PSS with dry gas (instrument air or nitrogen) for 5 minutes. Inadequate flushing can result in damage to the system. A careful flushing routine is especially important after measuring wet and corrosive gases.
- > In case of overpressure in the stack, probe must be out of stack when measuring background. Overpressure causes the sample gas to flow into the measuring system, considerably decreasing the background quality.
- > Intensive shocks may damage the sampling system. Be always very careful when you move or transport the instrument.
- > Use a soft cloth to wipe off the dirt on the case. Do not use strong detergents or acetone.
- > Never replace Gasmet power supply cord by an inadequately rated cord.

6.2. Maintaining the PSS

6.2.1. Maintenance plan

To keep your sampling system in optimal condition, maintenance is recommended at certain intervals. Recommended maintenance and intervals are defined in Table 1. After maintenance, the sampling system is visually inspected and correct operation is ensured.

MAINTENANCE INTERVAL	MAINTENANCE WORK
Before every use	Check heated lines connectors, sample filter unit O-rings and sample filter.
After every use	Disconnect the equipment from AC outlet before cleaning the enclosure. Check the sample filter and replace it if necessary. Read the instructions given below.
1 month	Visual inspection, ventilation filter check, sample filter O-rings check (according to the instructions given below).
3 years	Official service including pump change

Table 1. Maintenance intervals for PSS Base and PSS Plus.

6.2.2. Visual Inspection

When you make the visual inspection, check that:

- > Sampling system cover is somewhat clean and unharmed.
- > Front panel, gas fittings, connectors are in good condition.
- > Sample gas flow is correct: when pump is on, you can feel a gas flow from the sample outlet.
- > Sampling system, sample lines and gas connectors are in good condition, no leakages or dirt inside
- > Sample filters are clean; the cleaning interval of sample filters depends on the amount of dust in the sample gas.

6.2.3. Replacing sample filter

The cleaning/replacement frequency of the sample filters depends on the quality of the measured sample gas. In the beginning of the operation after installation, it is recommended to check the quality of the sample filters very often, so that the correct cleaning/replacement frequency can be found out.

The Gasmet portable sampling system includes at least two filters, one in the portable sample probe and one in the sampling unit. The sampling unit filter is used as a backup sample filter for the sample probe main filter.

Checking or cleaning/replacing the PSS sample filters, the sample pump must be switched off, so that there is no sample gas flow in the system. The zero gas (5.0 purity nitrogen) or instrument air should be flowing through the system.



WARNING!

HARMFUL CHEMICAL CONDENSATE MAY HAVE FORMED. AVOID SKIN CONTACT. WEAR PROTECTIVE GLASSES AND PROPER PROTECTIVE CLOTHING!



HIGH SURFACE TEMPERATURE, WEAR PROTECTIVE GLOVES!

To release and remove the sample filter housing, push the sample filter housing handle in. Once it is pushed in half a centimeter rotate counter-clockwise about 20 degrees until the handle is in line with the unlock symbol.. Pull out the filter housing and remove the filter nozzle with a 5 mm hex key at the end. If it is stuck, use a 32 mm wrench around the nozzle. Replace with clean sample filter. Do not unnecessarily touch the clean sample filter to avoid unwanted residues. Push the filter housing back into the sampling system and rotate back to place.

If you have difficulties getting the sample filter housing out from the sampling system, turn the unit on to heat up and try again once it is hot.

To reinsert the filter assembly, align the handle with the unlock symbol. Push the assembly in without rotating, then rotate 20 degrees clockwise so the handle is in line with the lock symbol. Pull the handle towards yourself to check it is fixed in place, it should only move half a centimeter.



Figure 5. Changing the sample filter. 1. Filter housing handle in open position. 2. Sample filter and filter housing. 3. Filter housing handle in closed position.

6.2.4. Ventilation filter check

PSS ventilation filter is located on the front panel. Use a 2 mm hex key to remove the four bolts around the front ventilation slots. Remove the plate and replace the filter if it is clogged. Reinsert the plate and bolts. Do not overtighten! There is no filter on the ventilation out on the back.

6.2.5. Fuse replacement

Sampling system is equipped with two fuses, one for phase and one for neutral. Both fuses need to be intact for sampling system to work. Maximum fuse size is 12.5 A for 230 VAC version and 17 A for 115 VAC version. Fuse size is standard 5 x 20 mm.



WARNING!

USING A LARGER FUSES WILL DAMAGE THE SAMPLING SYSTEM!

ALWAYS TURN OFF THE POWER OF THE SAMPLING SYSTEM BEFORE CHANGING THE FUSES BY DISCONNECTING THE POWER CORD FROM MAINS!

Fuses are located in separate fuse holders next to the power cord (see Figure 6) Use big screwdriver or coin to turn the fuse holder cover anti clockwise until it can be removed. Fuse is located inside the holder cover and can be removed by pulling it out. Reverse the steps to insert the new fuse. Remember to change both fuses at the same time.



Figure 6. Changing the fuses. 1. Location of fuses. 2. Fuse holder. 3. Fuse.

7. PSS technical description

7.1. Power Supply



The sampling system is operated with external power. If the power supply cord is potentially damaged, please contact Gasmet before starting any maintenance.

7.1.1. Overheating protection switch

The sampling system has overheating protection switch integrated in the oven and for mains power. Any error condition will blow the internal fuse. [If the temperature alarm sounds in Calcmeter frequently, book the unit in for a service.](#)

7.2. Fittings and switches

The front side of PSS Base has sample filter housing access, switch for manual pump, communication indicator light and system status light. PSS Plus has all of this, and flowmeters for zero gas and instrument air.

The back side of both PSS models have gas inlet and outlet for sample gas, zero gas inlet, power inlets for heated sample lines, power switch as well as communication port for communication cable between analyzer and PSS. In addition to these, PSS Plus has inlet for instrument air.



Figure 7. PSS Plus front panel.



Figure 8. PSS Base front panel.



Figure 9. PSS Plus back panel.



Figure 10. PSS Base back panel.

7.2.1. Gas Fittings

All gas fittings in the PSS are grouped together on the same side of the unit. Fitting covers protect the fittings when the sampling system is not used.

The sample gas fittings are:

- > **SAMPLE IN:** Connection of the sample gas inlet. The sample gas enters the system from this inlet.
- > **SAMPLE OUT:** Sample gas outlet. The sample line connected here directs the sample gas to the gas analyzer.
- > **ZERO GAS:** Zero gas inlet for background measurements.
- > **INSTRUMENT AIR:** For PSS Plus connect instrument air to *Instrument air* inlet. However, if you do not have instrument air connect N₂.

7.2.2. Heated line power cable fittings

The PSS back panel also includes heated line power cable connectors for *Sample in* and *Sample out* gas fittings. The power cable connectors are always active. In order to bypass the connector, select *Off* from Calcmeter > *Configuration* > *GT6000* -tab.

When connecting heated lines, make sure that the heated line power cable connector has the correct wire order. Incorrect connection can cause damages to circuit board. For the correct coupling, follow the instructions in *Figure 11* or *Figure 12*.

NOTE! The coupling method to be followed depends on the serial number of the device. If the serial number is 55711 or higher, refer to *Figure 11* for instructions. If serial number is lower than 55711, follow the instructions provided in *Figure 12*.

In case serial number is 55711 or higher:

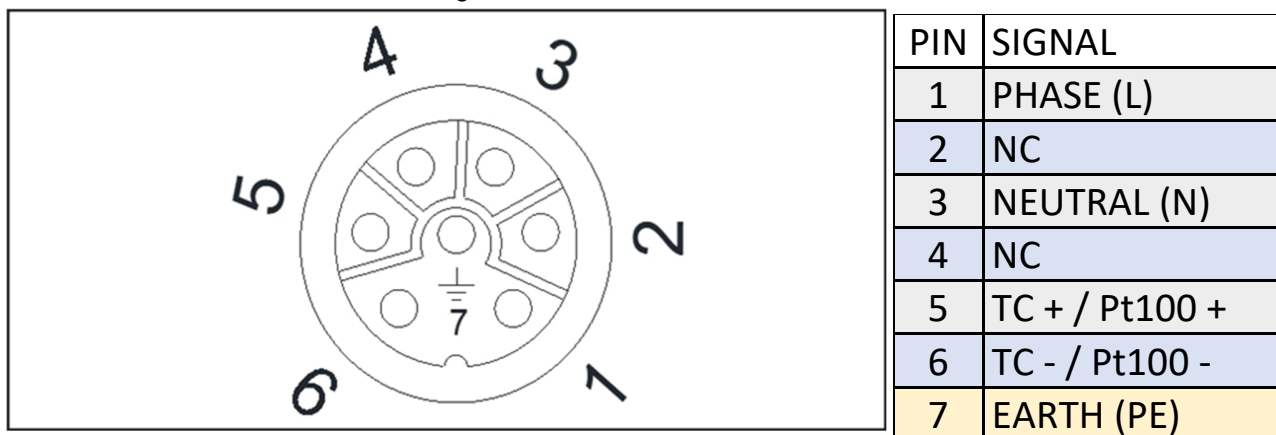


Figure 11 Heated line power cable connections (PSS outside, connector front view)

In case serial number is lower than 55711, PSS has support for 2- to 4-wire PT100 sensor

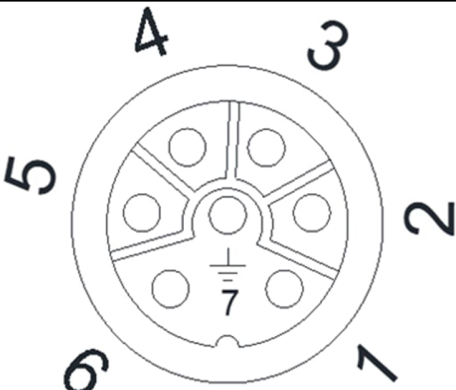
LINE IN/OUT CONNECTOR	PIN	SIGNAL
	1	PHASE (L)
	2	Pt100 D+
	3	NEUTRAL (N)
	4	Pt100 D-
	5	TC + / Pt100 S+
	6	TC - / Pt100 S-
	7	EARTH (PE)

Figure 12 Heated line power cable connections (PSS outside, connector front view)

In case of **3-wire PT100** sensor, white wire is connected to pin 6 and jumper wire from pin 6 to pin 4.

In case of **2-wire PT100** sensor, white wire is connected to pin 6 and jumper wire from pin 6 to pin 4. Red wire is connected to pin 5 and jumper wire from pin 5 to pin 2.

7.2.3. Communication Port

Gasmet communication cable is connected to the communication port to allow communication between Gasmet gas analyzer and sampling system.

7.3. Sample filters

As a default, PSS Base and Plus come with a 2 µm PTFE sample filter. A stainless steel 0.1 µm filter is available as an option. The PSS filter is a backup filter, a primary sample filter must be used before the PSS. The filter must be checked periodically and replaced when it is dirty. Inadequate or blocked filter will damage the measuring system.

7.4. Probe

PSP4000 probe is available as an optional accessory for the PSS Base and Plus. Even if you do not purchase the PSP4000 probe, you must use an adequate probe filter (at least 2 µm filtration) in front of the PSS. Without proper filtration, particles in the sample gas can irreversibly damage the sample cell.

For instructions on the use of the PSP4000 sampling probe, please refer to its user manual.

Appendix A: Gasmet Sales and Support Offices



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