



OPERATING INSTRUCTIONS

EN

Translation of the Original

WEB UI

User interface for the QMG 250 PrismaPro[®]

Dear Customer,

Thank you for choosing a Pfeiffer Vacuum product. Your new mass spectrometer should support you in your individual application with full performance and without malfunctions. The name Pfeiffer Vacuum stands for high-quality vacuum technology, a comprehensive and complete range of top-quality products and first-class service. From this extensive, practical experience we have gained a large volume of information that can contribute to efficient deployment and to your personal safety.

In the knowledge that our product must avoid consuming work output, we trust that our product can offer you a solution that supports you in the effective and trouble-free implementation of your individual application.

Please read these operating instructions before putting your product into operation for the first time. If you have any questions or suggestions, please feel free to contact info@pfeiffer-vacuum.de.

Further operating instructions from Pfeiffer Vacuum can be found in the [Download Center](#) on our website.

Disclaimer of liability

These operating instructions describe all models and variants of your product. Note that your product may not be equipped with all features described in this document. Pfeiffer Vacuum constantly adapts its products to the latest state of the art without prior notice. Please take into account that online operating instructions can deviate from the printed operating instructions supplied with your product.

Furthermore, Pfeiffer Vacuum assumes no responsibility or liability for damage resulting from the use of the product that contradicts its proper use or is explicitly defined as foreseeable misuse.

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We reserve the right to make changes to the technical data and information in this document.

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1 About this manual



IMPORTANT

Read carefully before use.
Keep the manual for future consultation.

1.1 Validity

This document describes the function of the products listed in the following and provides the most important information for safe use. The description is written in accordance with the valid directives. The information in this document refers to the current development status of the products. The document retains its validity assuming that the customer does not make any changes to the product.

1.1.1 Related documents

Designation	Document
Operating instructions "PrismaPro" QMG 250	BG 6001
Quick-Start guide "PrismaPro" QMG 250	BG 6003
Software documentation PV MassSpec	(Part of the software)

Tbl. 1: Related documents

Current documents are available from the [Pfeiffer Vacuum Download Center](#).

1.1.2 Variants

This document applies to products with the following part numbers:

Part number	Designation
PT M15 ...	QMG 250 PrismaPro (Faraday)
PT M16 ...	QMG 250 PrismaPro (Faraday/electron multiplier)

Tbl. 2: QMG 250 PrismaPro

Part number	Short description	Mass range [u]	Detector	Ion source	Filament	Wiring
PT M25 411	QMA 250 F1	1 – 100	Faraday	open	W	Nickel
PT M25 412					Ir-Y ₂ O ₃	
PT M25 413	QMA 250 M1		Faraday/EM	CB	W	
PT M25 414					Ir-Y ₂ O ₃	
PT M25 415			Grid	W	Copper, silver-plated	
PT M25 416						
PT M25 419						
PT M25 421	QMA 250 F2	1 – 200	Faraday	open	W	Nickel
PT M25 422					Ir-Y ₂ O ₃	
PT M25 423	QMA 250 M2		Faraday/EM	CB	W	
PT M25 424					Ir-Y ₂ O ₃	
PT M25 425			Grid	W	Copper, silver-plated	
PT M25 426						
PT M25 429						

Part number	Short description	Mass range [u]	Detector	Ion source	Filament	Wiring
PT M25 431	QMA 250 F3	1 – 300	Faraday	open	W	Nickel
PT M25 432					Ir-Y ₂ O ₃	
PT M25 433	QMA 250 M3		Faraday/EM		W	
PT M25 434					Ir-Y ₂ O ₃	
PT M25 435			CB	W	Copper, silver-plated	
PT M25 436				Ir-Y ₂ O ₃		
PT M25 439	Grid	W				

Tbl. 3: Analyzer QMA 250

Part number	Short description	Mass range [u]	Input/Output
PT M28 641	QME 250 M1	1 – 100	Standard (without IO 250)
PT M28 642	QME 250 M2	1 – 200	
PT M28 643	QME 250 M3	1 – 300	
PT M28 651	QME 250 M1	1 – 100	extended (with IO 250)
PT M28 652	QME 250 M2	1 – 200	
PT M28 653	QME 250 M3	1 – 300	

Tbl. 4: Electronic unit QME 250

You can find the part number on the rating plate of the product.

Pfeiffer Vacuum reserves the right to make technical changes without prior notification.

The figures in this document are not to scale.

Dimensions are in mm unless stated otherwise.

1.2 Target group

These operating instructions are aimed at all persons performing the following activities on the product:

- Transportation
- Setup (Installation)
- Usage and operation
- Decommissioning
- Maintenance and cleaning
- Storage or disposal

The work described in this document is only permitted to be performed by persons with the appropriate technical qualifications (expert personnel) or who have received the relevant training from Pfeiffer Vacuum.

1.3 Conventions

1.3.1 Instructions in the text

Usage instructions in the document follow a general structure that is complete in itself. The required action is indicated by an individual step or multi-part action steps.

Individual action step

A horizontal, solid triangle indicates the only step in an action.

- ▶ This is an individual action step.

Sequence of multi-part action steps

The numerical list indicates an action with multiple necessary steps.

1. Step 1
2. Step 2
3. ...

1.3.2 Pictographs

Pictographs used in the document indicate useful information.



Note



Tip

1.3.3 General safety information

The following 4 risk levels and 1 information level are taken into account in this document.

⚠ DANGER

Immediately pending danger
Indicates an immediately pending danger that will result in death or serious injury if not observed.

- ▶ Instructions to avoid the danger situation

⚠ WARNING

Potential pending danger
Indicates a pending danger that could result in death or serious injury if not observed.

- ▶ Instructions to avoid the danger situation

⚠ CAUTION

Potential pending danger
Indicates a pending danger that could result in minor injuries if not observed.

- ▶ Instructions to avoid the danger situation

NOTICE

Danger of damage to property
Is used to highlight actions that are not associated with personal injury.

- ▶ Instructions to avoid damage to property

i Notes, tips or examples indicate important information about the product or about this document.

1.3.4 Abbreviations

Abbreviation	Explanation
DHCP	Dynamic Host Communication Protocol (communication protocol for assigning the network configuration)
EM	Electron Multiplier (secondary electron multiplier)
IP	Internet Protocol
LAN	Local Area Network (local network)
RGA	Residual Gas Analyzer
Web UI	Web User Interface (web-based user interface)

Tbl. 5: Abbreviations used

1.4 Trademarks

- PrismaPro® is a trademark of Pfeiffer Vacuum GmbH.
- Windows® and Internet Explorer® are trademarks of Microsoft Corporation.
- Firefox® is a trademark of Mozilla Foundation.
- Chrome® and Android® are trademarks of Google Inc.
- Opera® is a trademark of Opera Software AS.
- Safari®, iPhone® and iPad® are trademarks of Apple Inc.
- Galaxy® is a trademark of Samsung.

2 Introduction to PrismaPro Web UI

The QMG 250 PrismaPro includes the PrismaPro Web UI, an onboard, browser-based user interface, which allows control and monitoring of PrismaPro by network devices.

The PrismaPro Web UI

- displays data in a spectrum window.
- can carry out a leak test, if the computer controlling the PrismaPro is located remotely from the PrismaPro.
- provides a diagnostic window that shows the unit status and any errors.

You should use the PrismaPro Web UI in parallel to PV MassSpec.



PrismaPro Web UI does not allow data storage

PrismaPro Web UI is a remote monitoring and diagnostic tool, and is designed for data monitoring and simple vacuum diagnostics. The storage of data or display of data in a trend graph is not possible with PrismaPro Web UI.

Use a complete software program such as PV MassSpec for the storage of data, the selected peak mode or trend graphs.

3 System requirements

PrismaPro Web UI allows control of the PrismaPro via a standard Internet browser, and fully supports the following browsers:

- Microsoft Internet Explorer 10
- Mozilla Firefox
- Google Chrome

PrismaPro Web UI does **not** support the following browsers:

- Opera
- Apple Safari

Parameter	Requirement
Processor	Pentium 4 1.8 GHz or higher
Random access memory (RAM)	1 GB or higher
Resolution	1024 x 768, 16-bit color or higher
Operating system*	Windows 7, Windows 8, Windows 10, Windows Vista, Windows XP**
Connection	Ethernet

*) PrismaPro Web UI itself has no operating system requirements. The requirements depend on the browser used.

**) For Windows XP, Pfeiffer Vacuum recommends using Mozilla Firefox or Google Chrome, as Windows XP does not support Internet Explorer 10.

Tbl. 6: Minimum computer requirements

4 Connecting the PrismaPro Web UI

To establish a connection to the PrismaPro Web UI, you must connect the device you are using to run PrismaPro Web UI on the same network as PrismaPro.

If the device is not in the same network, then a connection to a computer located in the same network must be established via Remote Desktop.

PrismaPro Web UI then runs on the Remote Desktop computer.

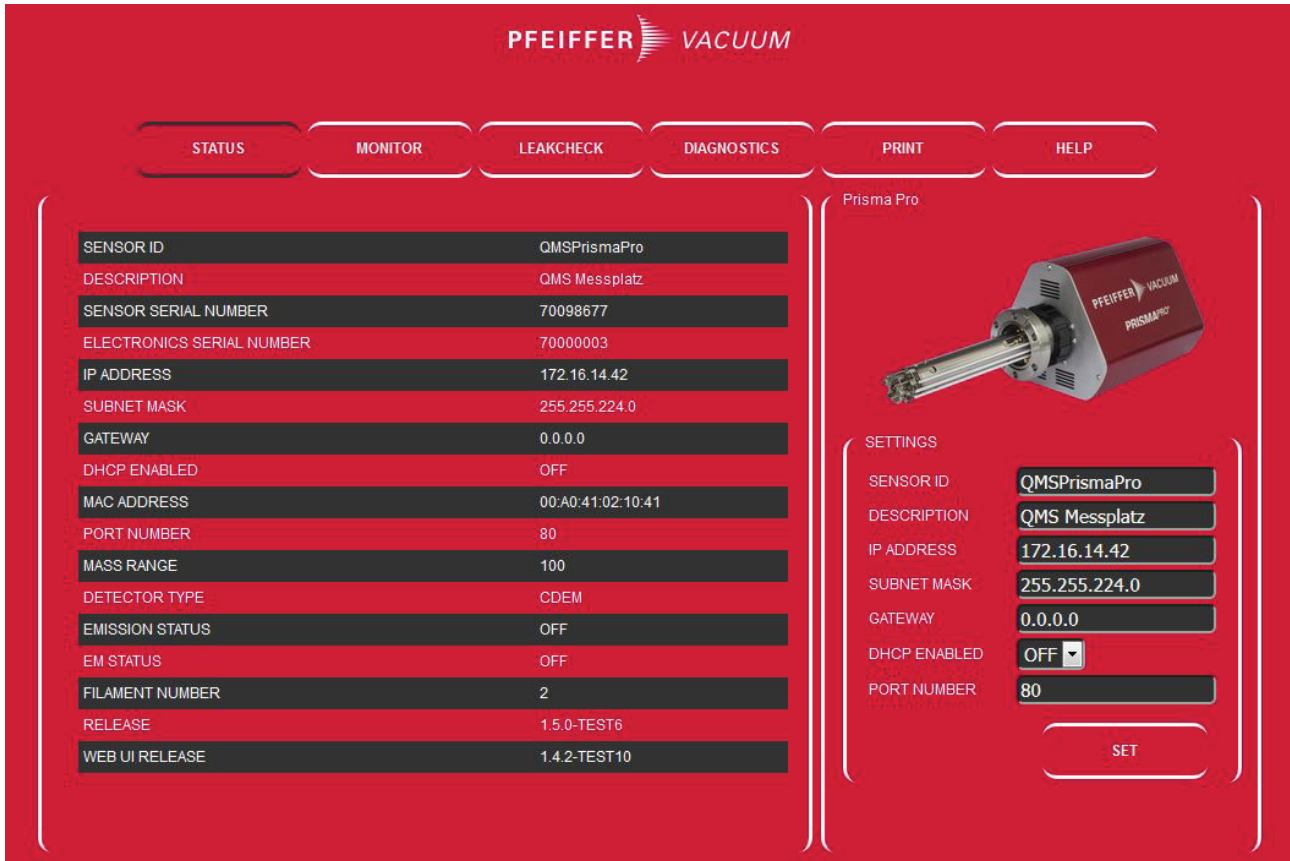


Fig. 1: PrismaPro Web UI: "STATUS" window

Connecting the PrismaPro Web UI via factory default IP address

The default IP address for PrismaPro is **192.168.1.100**.



You must also configure the device running the browser with an IP address on this network (e.g. 192.168.1.101).

1. Type the default IP address **192.168.1.100** into the browser address bar.
2. Press Enter.
 - The browser connects to the PrismaPro. If the PrismaPro is switched on and connected to the same network as the computer, the "STATUS" window appears in the PrismaPro Web UI.
3. If the "STATUS" window does **not** appear: Refresh the browser.
4. If the "STATUS" window still does not appear, proceed as follows:
5. Check that the current IP address matches the factory preset IP address.
6. If the IP address matches: Connect PrismaPro Web UI via a user-defined IP address.
7. If the IP address does **not** match: Make sure that you have not connected any other devices to the PrismaPro Web UI.
8. Refresh the browser again.

Connecting the PrismaPro Web UI via user-defined IP address**Unknown IP address**

If you have changed the IP address and lost the new IP address, please contact Pfeiffer Vacuum.

1. Type the user-defined IP address into the browser address bar.
2. Press Enter.
 - The browser connects to the PrismaPro. If the PrismaPro is switched on and connected to the same network as the device, the “STATUS” window appears in the PrismaPro Web UI.
3. If the “STATUS” window does **not** appear: Refresh the browser.
4. If the “STATUS” window still does not appear, proceed as follows:
5. Make sure that you have not connected any other devices to the PrismaPro Web UI.
6. Refresh the browser again.

5 Navigating around the PrismaPro Web UI

The PrismaPro Web UI functionality spans various windows.

To navigate between windows, click on the button for the relevant window.

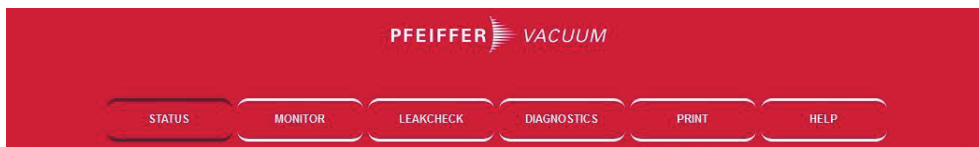


Fig. 2: Window selection buttons

The first window that the PrismaPro Web UI displays is the “STATUS” window.

The following sections identify and describe the various windows.

5.1 "STATUS" window

The “STATUS” window provides information about several parameters.

Here you can make changes to various parameters listed under “SETTINGS”. (see chapter “Setting the status parameters”, page 24)

Parameter	Description
SENSOR ID	User-definable ID for the PrismaPro.
DESCRIPTION	User-definable description for the PrismaPro; helpful for identifying different PrismaPro units.
SENSOR SERIAL NUMBER	Factory serial number of the connected PrismaPro. Each PrismaPro has a unique serial number.
ELECTRONICS SERIAL NUMBER	Factory serial number of the connected electronics.
IP ADDRESS	IP address of the connected PrismaPro. The PrismaPro has a default IP address of 192.168.1.100.
SUBNET MASK	Subnet mask of the connected PrismaPro. The PrismaPro has a default subnet mask of 255.255.0.0.
GATEWAY	Gateway of the connected PrismaPro. The PrismaPro has a default gateway of 0.0.0.0.
DHCP ENABLED	Specifies whether DHCP is ON or OFF (default).
MAC ADDRESS	MAC address of connected PrismaPro.
PORT NUMBER	Port used by the connected PrismaPro. The PrismaPro has a default port number of 80.
MASS RANGE	Mass range of the connected PrismaPro (100, 200, or 300 u).
DETECTOR TYPE	Detector type of the connected PrismaPro (either Faraday “FC” or secondary electron multiplier “CDEM”).
EMISSION STATUS	Status of the Analyzer emission (either "ON" or "OFF").
EM STATUS	Status of the Analyzer electron multiplier (where present) (either "ON", "OFF" or "NO EM").
FILAMENT NUMBER	Filament the analyzer is currently using (either 1 or 2).
RELEASE	Firmware version number.
WEB UI RELEASE	PrismaPro Web UI version number.

Tbl. 7: Parameters in the “STATUS” window

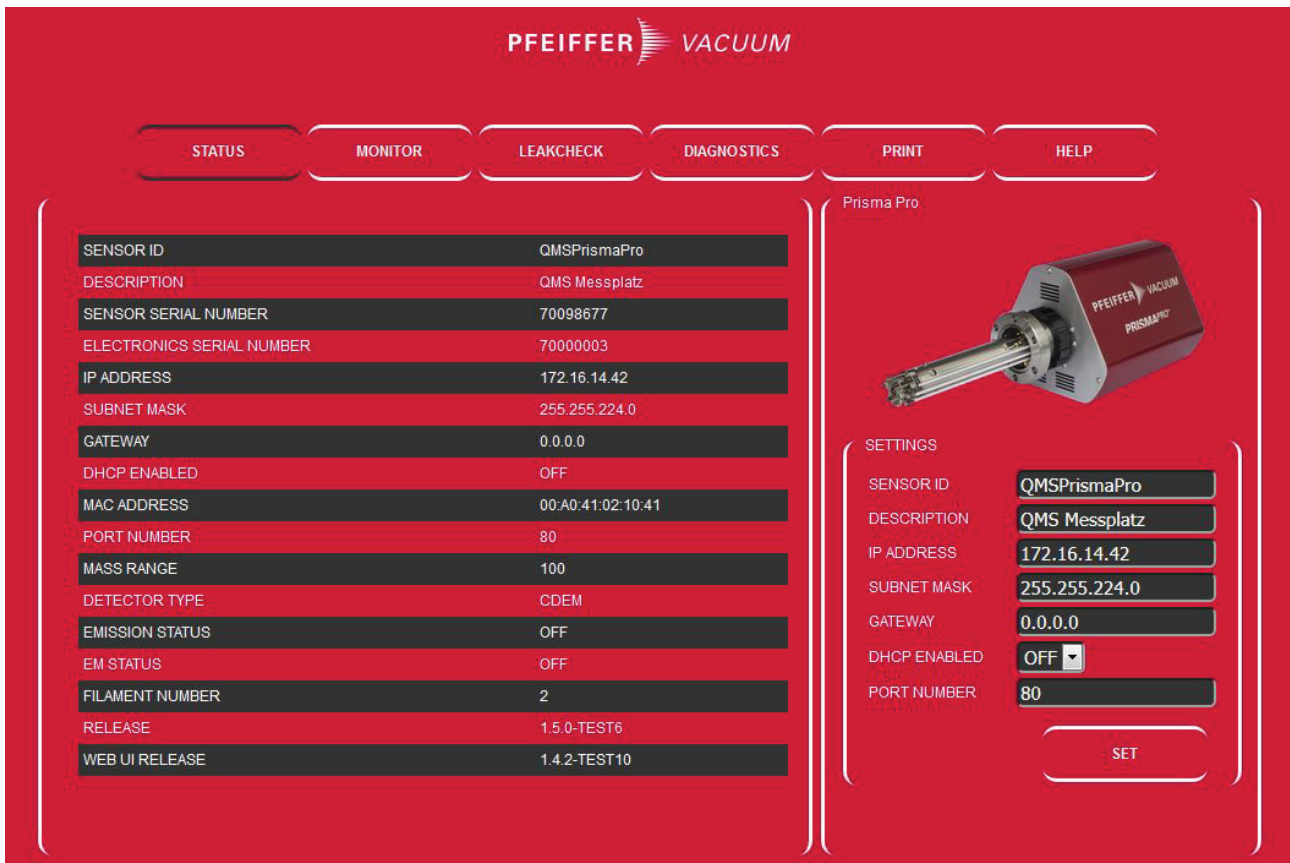


Fig. 3: "STATUS" window

5.2 "MONITOR" window

The "MONITOR" window is the PrismaPro Web UI data acquisition window.

The right side of the "MONITOR" window contains a group of editable fields.

- Scan parameters
- "EMISSION" switch for emission control
- "EM" switch for electron multiplier control

The EM field shows the electron multiplier voltage in volts [V].

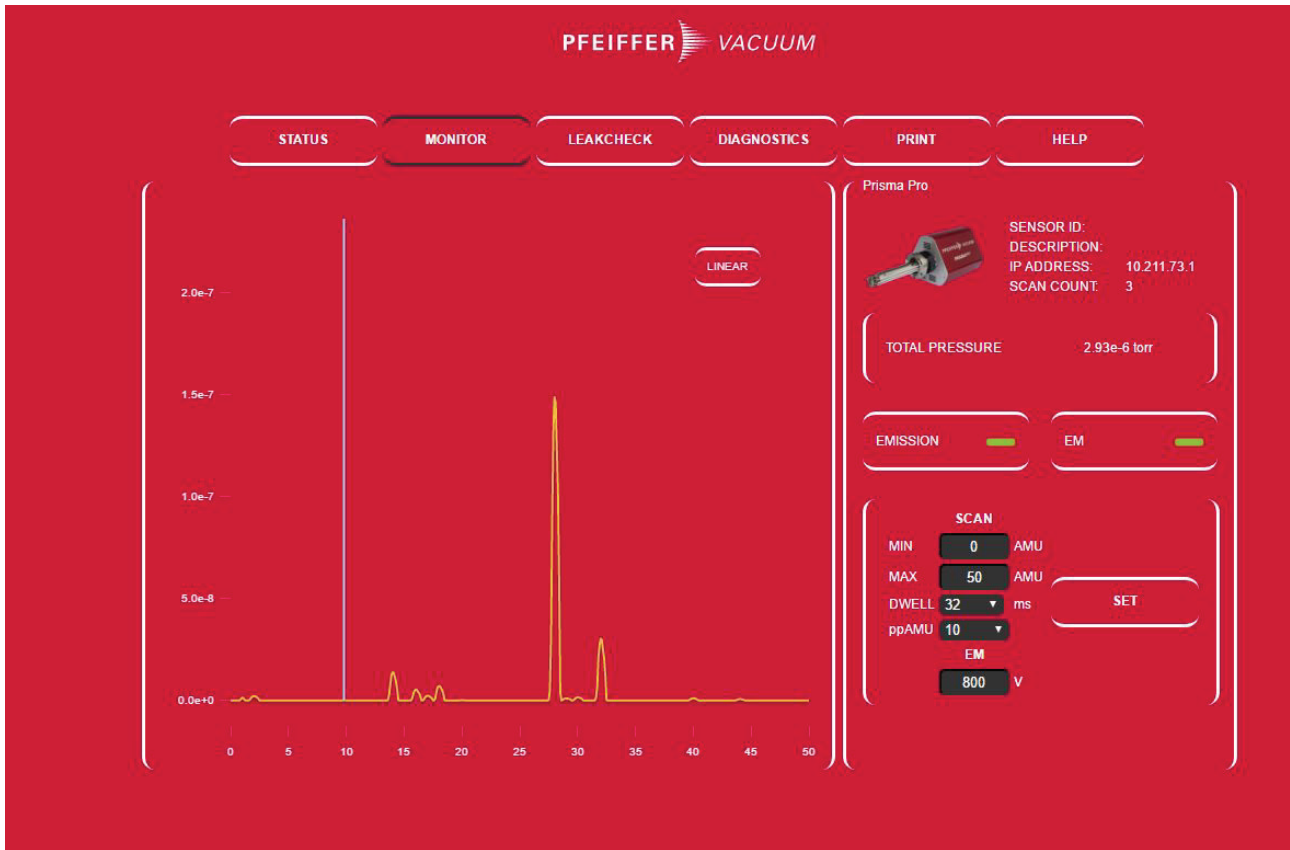


Fig. 4: "MONITOR" window

5.3 "LEAKCHECK" window

The "LEAKCHECK" window is used for leak testing with PrismaPro. (see chapter "Carrying out a leak test", page 23)

It uses the PrismaPro signal level to generate alarm states.

When you open the window for the first time, the PrismaPro Web UI generates alarm levels automatically, based on the current mass signal.

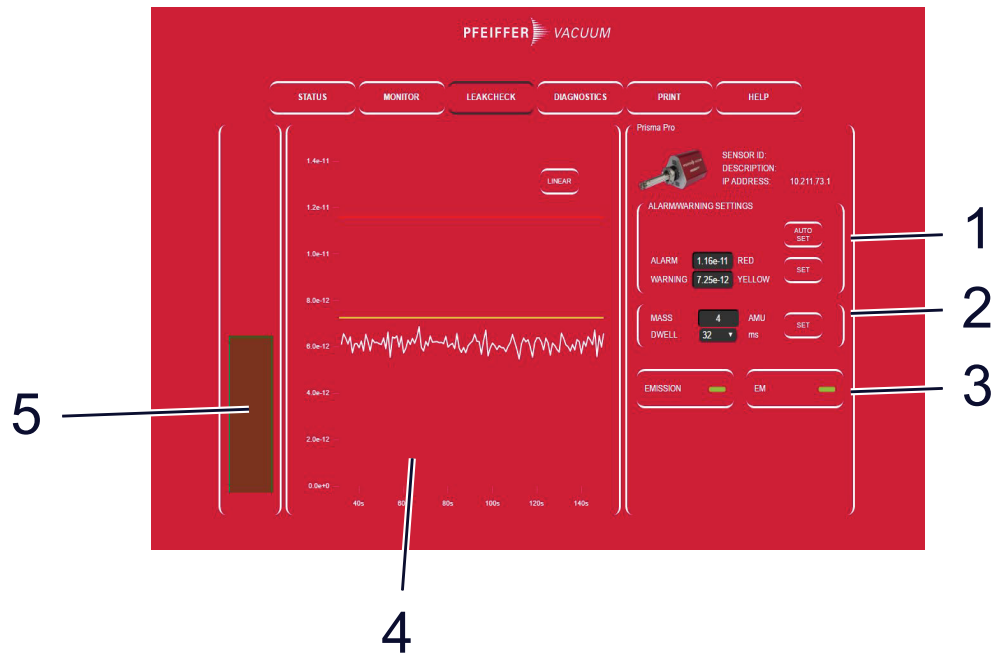


Fig. 5: "LEAKCHECK" window elements

- | | |
|-----------------------------|---|
| 1 Alarm/warnings/settings | 4 Display of measured values against time |
| 2 PrismaPro scan parameters | 5 Bar graph display |
| 3 Emission and EM control | |

Alarm/warnings/settings

Here you can manually or automatically change the leak test alarm levels.

PrismaPro scan parameters

PrismaPro can use each mass for leak testing.

You can change the dwell time that the device uses for the mass to be analyzed.

The Dwell parameter behaves in exactly the same way as for data acquisition.

Emission and EM control

Here you can switch both the emission and electron multiplier (where present) on and off.

Display of measured values against time

The mass trend graph indicates how the signal (in amperes) changes over time for the specified mass.

The trend diagram has two lines; one yellow and one red.

These lines represent the warning and alarm levels.

If the signal rises above these alarm level lines, a leak is present.

Bar graph display

The bar graph display shows the real-time signal level.

The bar rises and falls based on the signal (in amperes) of the specified mass.

If the signal exceeds the warning or alarm levels, the bar color changes.

There are three colors:

- green: no leak
- yellow: warning level exceeded
- red: alarm level exceeded

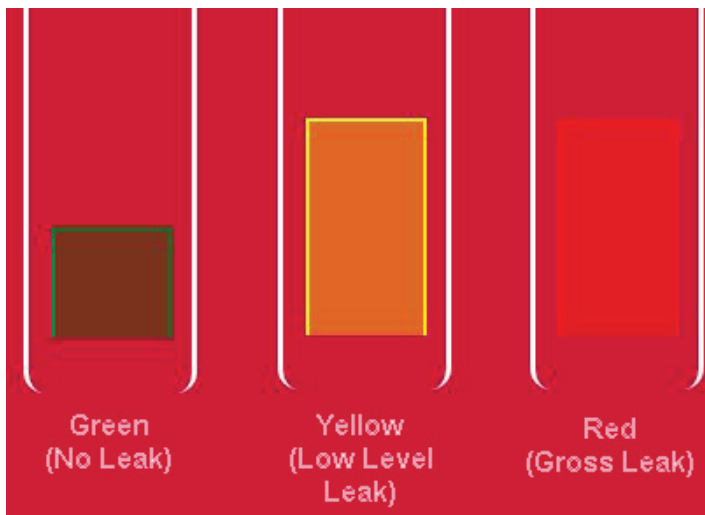



Fig. 6: Bar graph display colors

5.4 “DIAGNOSTICS” window

The "DIAGNOSTICS" window indicates the system status and contains additional diagnostic capabilities that can be helpful when contacting Pfeiffer Vacuum.



STATUS
MONITOR
LEAKCHECK
DIAGNOSTICS
PRINT
HELP

System Status

Emission Current	2000uA
Electron Energy	70V
Ion Energy	8000mV
Focus Potential	25V
Anode Potential	1V
Filament Potential	0.01V
Filament Current	0.04A
RF Frequency	3067kHz
RF Power	0mW
Box Temperature	36.4°C
Filament 1 On Time	4h
Filament 2 On Time	272h
EM On Time	46h
Box On Time	1036h
IS TP Trips	0

Supply Voltage

+24V CPU	24.0V
+15V CPU	15.0V
+5V CPU	5.0V
+3V3 CPU	3.3V
+1V5 CPU	1.5V
+1V2 CPU	1.2V
+24V PS	24.0V
+15V PS	15.0V
+5V PS	5.1V
+3V3 PS	3.3V
-5V PS	5.0V

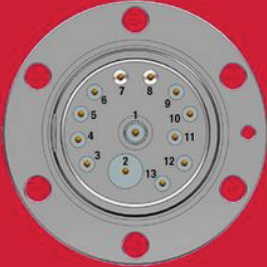
Firmware Revisions

Release	1.5.0-TEST6
Monitor Firmware	1.04.00
Control Firmware	1.05.00
Power Supply Firmware	4.01.00
API	742baa2
Board Revision	0712000012
Epoch Time	1497956506

Error Log

SENSOR PINOUT

To check filament continuity, use a multimeter to measure the resistance of Pins 3 and 10 for Filament #1, and Pins 4 and 10 for Filament #2. Resistance should be around 0.8 Ohms.



Pin	Assignment	Pin	Assignment
1	PP	8	GND
2	EM	9	RF+
3	Filament 1	10	Filament Common
4	Filament 2	11	Reserved
5	Anode	12	Focus
6	RF-	13	TP
7	GND		

FIRMWARE UPDATE

No file selected.

Fig. 7: "DIAGNOSTICS" window

5.5 "PRINT" window

"PRINT" allows you to call up a print dialog box to print the displayed window.

5.6 "HELP" window

"HELP" lets you open the PrismaPro Web UI operating manual and the Quick-Start Guide in a separate browser tab.

6 Using PrismaPro Web UI

This section contains instructions for common PrismaPro applications.

6.1 Using PrismaPro Web UI and PV MassSpec



PV MassSpec and PrismaPro Web UI cannot access the same Analyzer simultaneously.

PV MassSpec is the primary software package for the PrismaPro Analyzer.

PV MassSpec gives control of the PrismaPro analyzer to PrismaPro Web UI, only

- if you have stopped data acquisition, or
- when waiting for data acquisition to start.

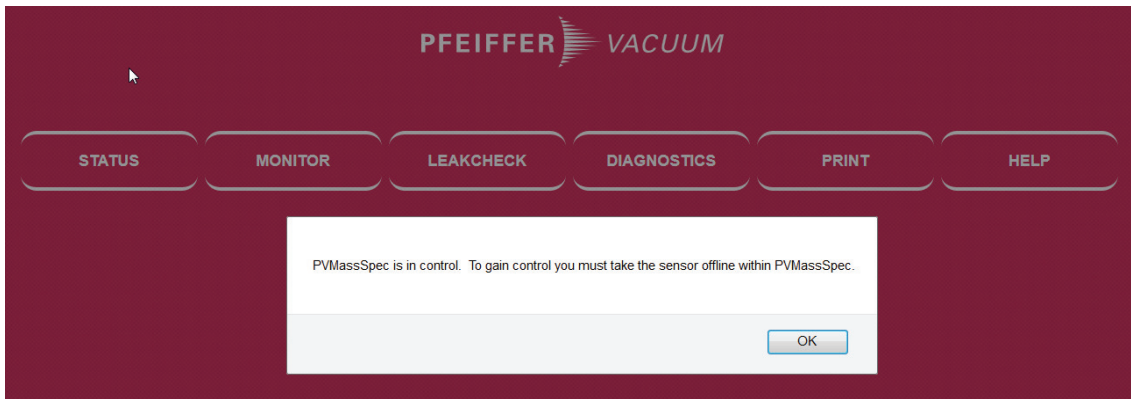


Fig. 8: Access by PV MassSpec

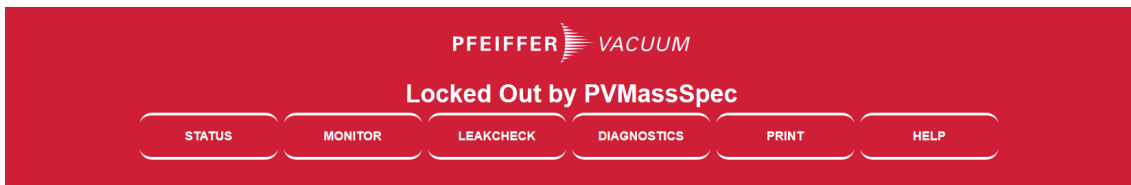


Fig. 9: Access by PV MassSpec

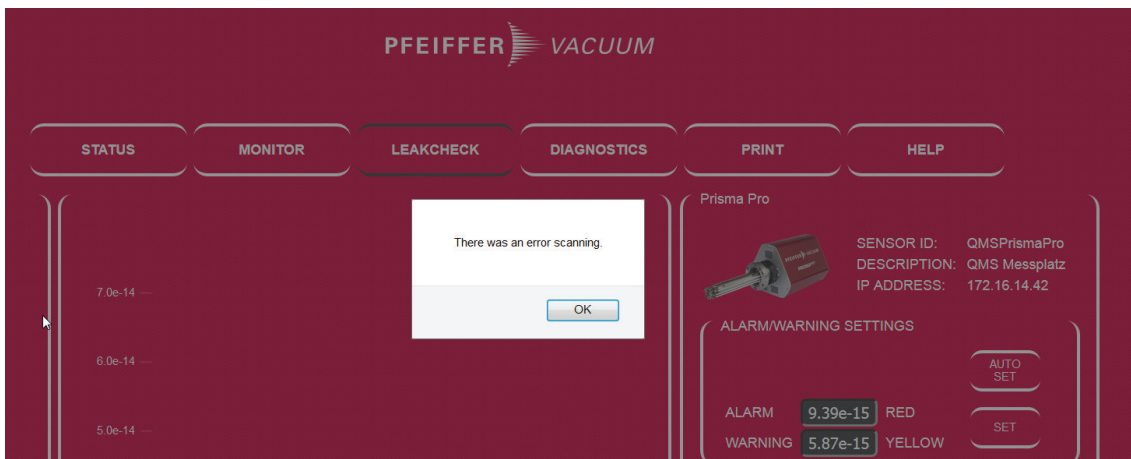


Fig. 10: Access by PV MassSpec (leak check message)

6.2 Using PrismaPro Web UI in stand-alone mode

This section contains instructions for using PrismaPro Web UI as a stand-alone software program.

6.2.1 Collecting data

The "MONITOR" window is used for data acquisition.



PrismaPro Web UI does not allow data storage

PrismaPro Web UI is a remote monitoring and diagnostic tool, and is designed for data monitoring and simple vacuum diagnostics. The storage of data or display of data in a trend graph is not possible with PrismaPro Web UI.

Use a complete software program such as PV MassSpec for the storage of data, the selected peak mode or trend graphs.

When you open the "MONITOR" window for the first time, the PrismaPro starts collecting data with the following default parameters:

Parameter	Value
Min (AMU)	0
Max (AMU)	50
Dwell	32 ms
ppAMU	10

Tbl. 8: Default monitor parameters

6.2.2 Modifiable parameters

PrismaPro has modifiable scan parameters that influence how data is collected.



Direct influence on data acquisition

"Emission" and "EM" are the only settings with direct influence on data acquisition if you modify them.

You can modify the other scan parameters, however, they only influence data acquisition if you click "SET".

Modifiable parameter	Description
Emission On/Off	Switches the filament in the PrismaPro ion source on or off. You must have switched on Emission: <ul style="list-style-type: none"> for data acquisition, to be able to switch on the electron multiplier, to carry out a leak test.
EM On/Off	Switches the electron multiplier (where present) on or off. Switching on the EM improves the PrismaPro signal-to-noise ratio, and allows smaller level signals above the noise to be seen.
Min	Start point for the scan in u. The minimum value is 0 for all variants.
Max	End point for the scan in u. The PrismaPro model specifies the maximum value: <ul style="list-style-type: none"> 100 u 200 u 300 u
Dwell (dwell time)	Time span during which the PrismaPro averages data for each measured point. <ul style="list-style-type: none"> Longer dwell time = reduced noise + increased scan time Shorter dwell time = increased noise + reduced scan time

Modifiable parameter	Description
ppAMU	Number of points collected by the PrismaPro for each u. 1 ppAMU generates a bar graph with one data point for each integer u value. > 1 ppAMU generates an analogue scan displaying peak shapes.
Linear/Logarithmic	Displays data in either a linear or logarithmic scale. As the PrismaPro has such a large dynamic range, the logarithmic scale is often helpful for detecting small impurities.

Tbl. 9: Modifiable parameters

Switching EMISSION on and off

There is an indicator to the right of the “EMISSION” button. This indicator changes color according to the emission state.

There are 3 colors:

- black: Emission off
- yellow: Warm-up phase
- green: Emission on



Fig. 11: “EMISSION” switch in the “MONITOR” and “LEAKCHECK” windows



Fig. 12: Three colors of the EMISSION indicator

Switching EMISSION on and off

- ▶ In the “MONITOR” or “LEAKCHECK” window, click on the “EMISSION” button to switch emission on or off.

Switching EM on and off

There is an indicator to the right of the “EM” button. This indicator changes color according to the electron multiplier operating state.

There are 3 colors:

- black: EM off
- green: EM on
- gray: EM unavailable (NO EM)



Fig. 13: “EM” switch in the “MONITOR” and “LEAKCHECK” windows



Fig. 14: EM off and on

Switching EM on and off

- ▶ In the “MONITOR” or “LEAKCHECK” window, click on the “EM” button to switch the electron multiplier on or off.

Changing scan parameters

The screenshot shows a red panel titled 'SCAN' with the following controls:

- MIN: 0 AMU
- MAX: 50 AMU
- DWELL: 32 ms (dropdown menu)
- ppAMU: 10 (dropdown menu)
- EM: 800 V
- A large 'SET' button is positioned to the right of the DWELL and ppAMU fields.

Fig. 15: Scan parameters in the “MONITOR” window**Changing scan parameters**

1. Enter the desired parameter values in the “MIN” and “MAX” fields.
2. In the “DWELL” and “ppAMU” fields, select the desired parameter values from the respective drop-down lists.
 - The drop-down lists contain all permissible values.
3. Click “SET” to restart data acquisition with the new parameters.

6.2.3 Carrying out a leak test

The PrismaPro is commonly used as a leak test tool, by:

- detecting leaks with helium.
 - You spray helium, and then monitor the change in helium concentration.
- detecting leaks by displaying increased nitrogen, oxygen, and carbon dioxide concentrations.

**The “SET” buttons are mutually independent.**

The “SET” buttons in the “LEAKCHECK” window for the alarm levels and scan parameters are mutually independent, and neither sets the parameters of the other area.

**Direct influence on data acquisition**

“Emission” and “EM” are the only settings with direct influence on data acquisition if you modify them.

You can modify the other scan parameters, however, they only influence data acquisition if you click “SET”.

**Acoustic alarm signals**

If you want acoustic alarm signals, make sure that you have configured the computer audio output accordingly, and that you are using Google Chrome as the browser.

Parameter	Value
Mass	4 (helium)
Dwell	32 ms
Emission	The current PrismaPro status is used.
EM (where present)	

Tbl. 10: Default parameters

Carrying out a leak test (PrismaPro Web UI)

1. Switch to the "LEAKCHECK" window.
 - Once the "LEAKCHECK" window is open, the PrismaPro starts collecting data with the default parameters.
2. Specify the test gas to be used for the leak test.
 - The test gas is typically helium, with a mass of 4 u.
3. Set the desired u and DWELL scan parameters.
 - Enter the test gas masks in [u], and select the desired dwell from the drop-down list.
4. Click on "SET" to transfer the entered values.
5. Set the desired alarm levels.
 - Automatic or manual: With "AUTO SET", PrismaPro Web UI generates alarm levels automatically, based on the newly acquired data. In manual, you must highlight the desired alarm level, enter the desired alarm level, and then click "SET".
6. If the signal exceeds the alarm levels **before** the test gas is sprayed, click "AUTO SET".
 - By doing so, you reset the alarm level to below the current alarm. "AUTO SET" means that the signals generated by the PrismaPro are normal and appear green for the alarm level.
7. Switch on the emission.
 - You must switch on the emission to carry out leak detection.
8. Switch on the electron multiplier (where present).
9. Spray the test gas around the area under investigation, while monitoring changes in the display of mass against time and the bar graph display.
10. If a leak is present, the software indicates this by the signal exceeding the warning or alarm lines, and by a change in the color of the bar graph display.
 - An acoustic alarm sounds, if you have enabled this.
11. Once you have completed the leak test, you can exit the "LEAKCHECK" window.

6.2.4 Setting the status parameters

Below you will find information on setting status parameters.

SETTINGS	
SENSOR ID	QMSPrismaPro
DESCRIPTION	QMS Messplatz
IP ADDRESS	172.16.14.42
SUBNET MASK	255.255.224.0
GATEWAY	0.0.0.0
DHCP ENABLED	OFF
PORT NUMBER	80
SET	

Fig. 16: Status parameters

Sensor ID**Changing the sensor ID**

1. Open PrismaPro Web UI.
2. Open the "STATUS" window.
3. Delete the current sensor ID in the "SETTINGS" group and enter the new sensor ID.
4. Click on "SET".

Sensor description**Changing the sensor description**

1. Open PrismaPro Web UI.
2. Open the "STATUS" window.

3. Delete the current sensor description in the “SETTINGS” group and enter the new sensor description.
4. Click on “SET”.

IP address

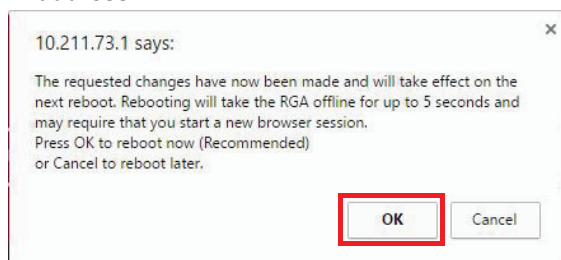


Fig. 17: Note

Changing the PrismaPro IP address manually



PrismaPro Web UI is no longer accessible via the default IP address.

If you change the PrismaPro IP address, you will no longer be able to reach the PrismaPro Web UI via the default IP address.

You must switch the PrismaPro off and back on again, then reopen PrismaPro Web UI by entering the new IP address in the browser address bar. You may also need to change the IP address of your device (e.g. computer).

Contact your IT administrator for PrismaPro IP parameter assignment.

1. Open the “STATUS” window.
2. Delete the current IP address in the “SETTINGS” group.
3. Enter the new IP address.
4. Click on “SET”.
 - A notification window appears.
5. Click on “OK” in the information window.
 - The PrismaPro restarts automatically and then uses the new IP address.

Subnet mask

Changing the PrismaPro subnet mask

The PrismaPro has a default subnet mask of 255.255.0.0.

The PrismaPro subnet mask must match the subnet mask of the computer network on which you have installed PrismaPro.

1. Connect the PrismaPro to a computer with a subnet mask of 255.255.0.0.
2. Open PrismaPro Web UI.
3. Open the “STATUS” window.
4. Delete the current subnet mask in the “SETTINGS” group and enter the new subnet mask.
5. Click on “SET”.
6. Restart the PrismaPro.
 - After the restart, the PrismaPro uses the new subnet mask for the network to which it is connected.

Gateway

Changing the PrismaPro gateway

The PrismaPro has a default gateway of 0.0.0.0.

If the network to which you have connected the PrismaPro requires a gateway, you must update this in the PrismaPro.

1. Connect the PrismaPro to a computer with a gateway of 0.0.0.0.
2. Open PrismaPro Web UI.
3. Open the “STATUS” window.
4. Delete the current gateway in the “SETTINGS” group and enter the new gateway.

5. Click on "SET".
6. Restart the PrismaPro.
 - After the restart, the PrismaPro uses the new gateway for the network to which it is connected.

DHCP

Using DHCP to assign IP addresses

The DHCP is off by default.

You require the PV MassSpec software on the computer; otherwise, you will be unable to determine the new PrismaPro IP address.

1. Open the "STATUS" window.
2. Select "ON" from the "DHCP ENABLED" drop-down list in the "SETTINGS" group.
3. Click on "SET".
4. Restart the PrismaPro.
 - After switching on the PrismaPro, the PrismaPro Web UI browser session connects to the original IP address, but will not initially function.
5. To establish a connection to the PrismaPro Web UI, you must run the PV MassSpec Search Utility to find the new PrismaPro IP address.
 - The PV MassSpec Search Utility finds the PrismaPro and displays the new IP address.
6. Refer to the PV MassSpec software documentation for the required information.

Port number

Changing the PrismaPro port number

The PrismaPro has the default port number of 80.

If the network on which you have installed PrismaPro blocks this port, you must modify the port number.

1. Connect the PrismaPro to a computer with an open port 80.
2. Open PrismaPro Web UI.
3. Open the "STATUS" window.
4. Delete the current port number in the "SETTINGS" group and enter the new port number.
5. Click on "SET".
6. Restart the PrismaPro.
 - After the restart, the PrismaPro communicates via the new port number and is connected to the network.

6.3 Desktop shortcuts

As PrismaPro Web UI is browser-based, you can create desktop shortcuts to open the browser directly with the linked web page. By doing so, memorizing the IP address for a (or multiple) PrismaPro Analyzer(s) is not necessary. Creating desktop shortcuts also allows you to differentiate between different PrismaPros, where more than one is available in the network.

Creating desktop shortcuts for quick access

1. Open PrismaPro Web UI.
2. Select the address from the browser address bar, and copy it to the clipboard (CTRL + C or right mouse + Copy).
3. Go to the computer desktop.
4. Right click on your mouse and select "New" and "Shortcut" from the context menu.
 - The "Create Shortcut" window opens.
5. Paste the saved address into the "Create Shortcut" window using CTRL + V (or right mouse click + Paste).
6. Click on "Next".
7. Enter a name for the desktop shortcut.
8. Click on "Finish".

The new desktop shortcut is now on the computer desktop.



If you change the PrismaPro IP address, existing desktop shortcuts will no longer work and you must recreate them.

6.4 Browser bookmarks

In addition to creating desktop shortcuts, you can also create bookmarks within your Internet browser.

Adding browser bookmarks

1. In the browser, press "CTRL+D" on the desired page.
2. Name the bookmark so that you can distinguish between different functions and sensors.

7 Suggested applications

7.1 Vacuum diagnostics

Using the PrismaPro Web UI, "MONITOR" menu and corresponding knowledge of reading RGA spectra, you can carry out a fast and simple vacuum diagnosis, to analyze causes of problems in a vacuum system. In this way, you can identify on the RGA spectrum whether there are leaks in the vacuum system, or whether contamination is the cause for an excessive pump-down time or the inability to achieve ultimate pressure. You can also determine the type of contamination present, under certain circumstances.

For a more detailed analysis, use the PV MassSpec software.

7.2 Leak test

PrismaPro Web UI is a useful tool for leak testing. When you open the "MONITOR" window for the first time, peaks at 28 u (nitrogen), 32 u (oxygen), and 44 u (carbon dioxide) indicate that an "air leak" (= outward leak to atmosphere) is present.

Using the "LEAKCHECK" menu, it is then very easy to locate the position of the leak.

Starting at the top, you must then briefly and slowly spray helium onto the seals and other vacant positions that could be the source of the leak; and monitor the chronological sequence and/or bar graph display in the "LEAKCHECK" window.

7.3 Remote monitoring

PrismaPro Web UI allows access to the PrismaPro from a remote, networked computer, without the limitations of a Remote Desktop connection.

As long as the PrismaPro is not blocked by another user, e.g., through the use of the "PV MassSpec" program, or measurement execution, you can make full use of the PrismaPro Web UI of the remote PrismaPro unit.

8 Malfunctions

The main problems that can occur with PrismaPro Web UI operation, are related to communication.

If you cannot open PrismaPro Web UI, check the following points:

Troubleshooting

1. Make sure that no one else is using PrismaPro Web UI.
 - PrismaPro Web UI blocks all incoming requests when you are actively using it.
2. Make sure that the web address (PrismaPro IP address) is correct.
 - If you have recently changed the IP address, make sure that you have set the browser to the correct address.
3. Make sure that the PrismaPro is connected to the 24 V DC voltage supply.
 - If this is the case, try resetting the current supply.
4. Make sure that the Ethernet cable is connected to the PrismaPro and the network.
5. Clear the browser cache.
 - You can find instructions on how to do this in your browser help files.
6. If these steps do **not** solve the issue, connect the PrismaPro directly to your computer (= bypassing the router/network), and try to connect the devices.
 - If the PrismaPro Web UI starts working, it is likely that the PrismaPro has an IP address conflict (another device on the network has the same IP address) or the network/router is blocking the port that the PrismaPro is using.
7. If the connection to the PrismaPro Web UI still does not work, please contact Pfeiffer Vacuum.

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