

Agilent Prostation

User interface software for the Agilent 990 Micro GC

Introduction

Agilent Prostation is a user interface software designed exclusively for the 990 Micro GC PRO and 990 Micro GC Express. Therefore it is integrated into the firmware of the 990 Micro GC whenever a PRO license or an Express license is ordered with the Micro GC.

Prostation is designed to make the GC setup, method development and all associated steps, simple and intuitive.

Installation and Familiarization is bundled in.

Part numbers

Part Number	Description	Short Details	Typical target user
Default	No SW licenses (Standard)	Basic features from instrument, fully rely on OpenLab for instrument control and data analysis.	Lab users who are familiar with OL or prefer OL's operation and data analysis.
G3584A Option 101	PRO License	Full process control.	OEM or out of lab users who need 990 as a sensor for 24/7 online monitoring (NGA, Plant process control).
G3584A Option 102	Mobile License	Limited process control. Includes WIFI dongle to allow remote operation.	Cost sensitive users or out of lab users, who need fast and easy deployment/analyze/reporting. Remote locations, coal mine.
G3584A Option 04R	Remove I&F	Remove Installation and Familiarization.	Channel partners and trained customers that do not need I&F because for example this is a repeated sale.

How to use Prostation

Prostation is embedded onto the Micro GC when a PRO or Express license is purchased. Prostation can be opened using (Figure 1):

- A wired connection to a PC or laptop
- Wireless (WIFI) connection to a tablet

Prostation is used to do method development and maintenance. The methods are then uploaded to the Micro GC. These methods contain the full range of parameters (Figure 2):

- GC conditions
- Data acquisition
- Data handling/peak integration/calculation
- Reporting
- Exporting results (Modbus, FTP, 420 mA)
- Save data (on-board, USB)

Once finished, Prostation can be closed and the Micro GC will run autonomously.

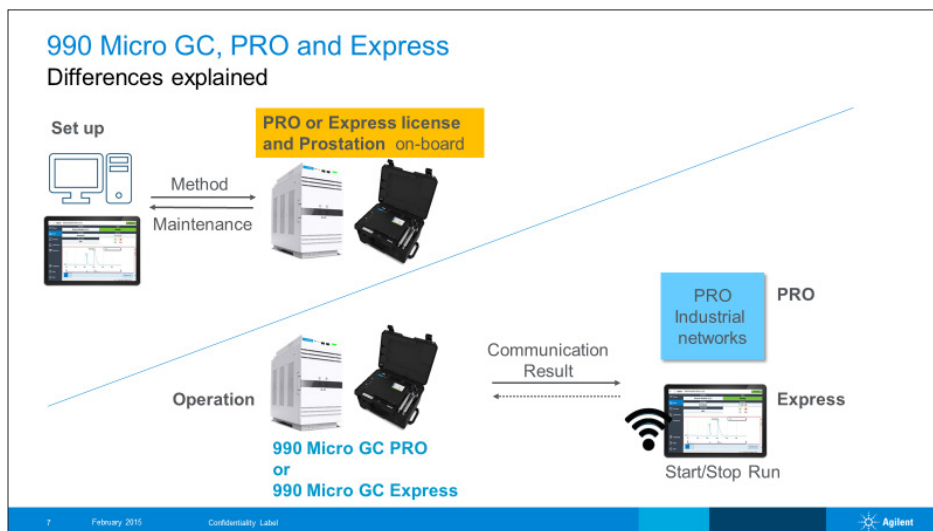


Figure 1.

The screenshot shows the Prostation software interface with the 'Method' tab selected. The 'Instrument setup' section is active, displaying parameters for Channel 1. The 'Channel Information' section shows 'Ar' selected for the gas type and 'Simulation' for the mode. The 'Injector' section includes 'Injector temperature (°C)' set to 100 (30.0), 'Injection time (mSec)' set to 40, and 'Backflush time (Sec)' set to an empty field. The 'Column and Pneumatic' section includes 'Column temperature (°C)' set to 80 (30.0), 'Pressure mode' set to 'Static', and 'Initial pressure (kPa)' set to 150 (50.0). The interface also shows tabs for 'Integration events', 'Peak Identification', and 'Calibration'.

Figure 2.

Some example screens — method development

Once the method(s) are uploaded to the Micro GC, it is ready to start the actual analysis/application.

For PRO this means usually that the Micro GC is transferred to a plant or similar to control and steer a process. The Micro GC is installed and connected to (usually) a flow computer from that particular plant and after receiving a start signal, 24/7 operation is set in motion.

In case of a 990 Micro GC Express the unit can be taken to the sample, wherever that is. Use the field case of that (remote) location does not have carrier gas and/or power readily available. Connect your phone or tablet to the WIFI signal of the Express and via the webbrowser the Micro GC can be controlled: choose a method and start a run.

International standards

If the 990 Micro GC is configured with the appropriate channels, the PRO license allows to calculate results and generate reports in natural gas analysis, physical properties calculations such as: calorific value, relative density, wobbeindex in accordance with:

- ISO 6976-2016
- GPA 2172
- ASTM D3588
- GOST-22667
- GOST-31369

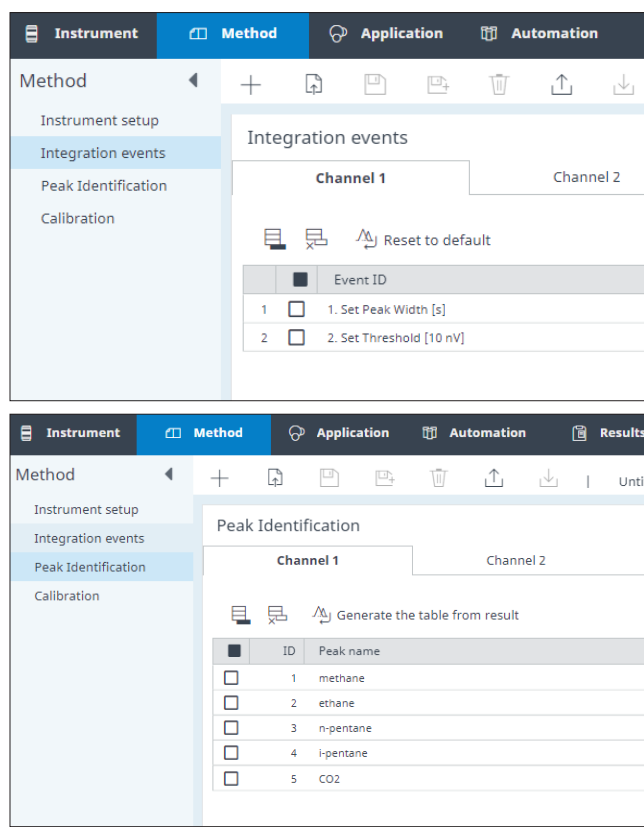


Figure 3.

Compatibility

Browser Client Version Compatibility Table					
990 Firmware	Microsoft Edge	Google Chrome	Safari for Mac/iPad	Firefox	Opera for Windows
2.1	Windows: 86+ Mac/iPad: 45+	80+	13+	Windows: 72+ Mac/iPad: 33+	70+

Recommended Tablet Model			
990 Firmware	Samsung Galaxy	Apple iPad	Huawei
2.1	Galaxy Tab A 8.0 (2018)+ Galaxy Tab S4+	iPad Mini 5+ iPad 6+ iPad Air 3+ Any iPad Pro	MatePad Pro+ MatePad+ M5+

Associated datasheets

- 990 Micro GC Datasheet – 5994-1270EN
- 990-PRO Micro GC Datasheet – 5994-1273EN
- 990 Mobile Micro GC Datasheet – 5994-1272EN

System requirements

Prostation works exclusively with Agilent 990 Micro GC systems and is embedded onto the GC.

To access Prostation requires one of the following:

- A wired PC or laptop with:
Windows 32-bit, Win XP SP3 64-bit, Windows 7 SP1 (Professional Version) 64-bit, or Windows 10 (Professional Version)
- A WIFI connection to a tablet

Languages supported

English

Compliance

Prostation is not intended for compliant workflows. We recommend our OpenLAB CDS products in cases where compliance is necessary.

Feature set

Features	Standard	Express	PRO
Instrument Status	Yes	Yes	Yes
Basic Setting and Maintenance	Yes	Yes	Yes
Method Editor	Yes *1	Yes	Yes
VICI Stream Selector	Yes *1	Yes	Yes
Sequence Editor	Yes *1	Yes	Yes
Data Analysis *4 and Report	Yes *1	Yes	Yes
Data Reprocessing	Yes *1	Yes	Yes
Verification Check	No	Yes	Yes
Application - Alarm	No	Yes	Yes
Application - Alarm Relay	No	No	Yes
Application - Timed Relay	No	No	Yes
Application - Digital Inputs	No	No	Yes
Application - Analog Outputs	No	No	Yes
Digital Output Events	Yes *1	No	No
Extension digital I/O *3	Yes *1	No	Yes
Extension analog I/O *3	No	No	Yes
LCD	Yes	Yes	Yes
LCD Customizable Content	No	Yes	Yes
FTP Storage	No	No	Yes
USB Storage	No	Yes	Yes
USB WIFI	No	Yes	Yes
Modbus TCP	No	No	Yes
Modbus Serial	No	No	Yes *2
Energy Meter	No	No	Yes *2
History Log	No	Yes	Yes *2
Trend Analysis	No	Yes	Yes

*1 Features are not realized by GC firmware, but provided by OpenLab instead.

*2 Those sub functions are enabled by default with the PRO license dongle.

*3 The total number of IOs can be extended by using the extension boards.

*4 The data analysis algorithm will be the same for all licenses.

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This information is subject to change without notice.

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