



# Agilent 7696A Sample Prep WorkBench

## Specifications

### Overview

The Agilent 7696A Sample Prep WorkBench is a state-of-the-art sample handling system that provides the highest levels of precision and reliability for GC, LC, GC/MS, and LC/MS Sample Prep Automation. The 7696A system consists of:

- Two liquid handling towers
- Three GC compatible trays of 50 vials each
- Heater – single vial position
- Spin/Vortex mixer
- Bar code reader
- Optional 50 vial tray heating and 50 vial tray Peltier cooling
- Dedicated, easy-to-use software
- Optional five decimal place readable semimicro balance
- Optional LC compatible trays



**Agilent Technologies**

## Compatibility

The 7696A Sample Prep Workbench is a standalone instrument, it is designed to operate in safe fume hood environment. It is compatible with any vendors LC, GC, LC/MS and GC/MS.

## Liquid handling features

- Fully programmable draw and dispense rates
- Support of 1, 5, 10, 25, 50, and 100- $\mu$ L syringes with a standard sample handling syringe carriage
- Support of 250- and 500- $\mu$ L syringes with an enhanced sample handling syringe carriage
- The liquid handling turret can hold up to three 2-mL vials at once for use with advanced liquid handling capabilities.
- Active vial-gripping mechanism
- Sensors in the vial-gripper mechanism detect that a vial has been grasped
- Sensors in the liquid handling turret detect that the vial has been transferred
- Sensors to detect the presence of an enhanced sample handling syringe carriage
- Illuminated syringe for easy viewing
- User-changeable syringe carriage
- Self-aligning liquid handling station and tray

## Liquid handling

The 7696A provides a wide range of liquid handling capabilities to provide maximum flexibility.

<b>Liquid handling parameter control</b>	<b>Parameter range</b>
Variable sampling depth	-2 to +30 mm above default
Pre- and post-liquid syringe	0-15 rinses for each of solvent A and B rinsing
Sample prewashes	0-15 prewashes
Viscosity delay	0-7 seconds
Solvent saver	Set at 10, 20, 30, 40, and 80% of syringe volume
Syringe size	1-, 2-, 5-, 10-, 25-, 50-, and 100- $\mu$ L maximum volume with standard syringe carriage  250- and 500- $\mu$ L maximum volume with optional enhanced sample handling syringe carriage

## **Sample Management**

### **Vial handling**

- System supports neckless (shell) vials, standard 2 mL vials, and micro vial inserts
- 150 vials in three separate trays
- Tray samples stored in three removable 5 × 10 racks
- Racks are compatible with multitype pipettes
- Supports both GC and LC sample trays

### **Liquid handling tower wash solvent**

- 10 × 4 mL for tower (usable solvent capacity of 20 mL)

### **Syringe support**

- Up to 100 µL with standard syringe carriage
- 250/500 µL with optional enhanced sample handling syringe carriage
- Supports compatible liquid and gastight syringes

### **Heater/Mixer/Bar code reader**

- Single vial heating (temperature range 35 to 80 °C)
- Single vial vortex mixing
- Heating time and mixing time are fully programmable
- Bidirectional mixing up to 4,000 RPM

### **G8140A Heater/Peltier chiller module**

- User installable
- Heats one tray of 50 vials (35 to 80 °C)
- Cools (Peltier) one tray of 50 vials (40 to 5 °C)
- Built-in sensors monitor temperatures in plates
- Uses aluminum vial racks to hold samples
- Software control of both tray zones
- Tray heated zones offer a +10 °C offset to accommodate vials with inserts

## Mettler Weigh Station module – option

- Must be installed by Agilent Service
- Five decimal place readable semimicro balance
- Built in OIML traceable reference weight for automatic internal calibration
- Built in deionizer to eliminate static influence on accurate weighing
- Integrated with hardware and software

## Technical and environmental – specific to Weigh Station

- Indoor use only in ordinary atmospheres
- Altitude up to 2,000 m
- Ambient operating temperature 10 to 30 °C
- Ambient operating humidity 20 to 65%, noncondensing
- Maximum capacity 10 grams
- Warm up time – 1 hour
- WorkBench mainframe support surface must be level
- Vibration limited to 0.05 Hz transmitted to WorkBench mainframe
- Compressed air supply – Clean, dry air – Instrument quality – water, oil and particle free with an input pressure setting of 5 psi (typical ¼ in supply line) [Max. pressure 20 psi] [Min. flow 15 Lpm]
- Main supply voltage fluctuations up to +10%/-15% of the nominal voltage
- Pollution degree 2, Installation Cat II
- Weigh Station is rated for mains connection to 100–240 VAC, 50/60 Hz, 0.5 A

## Attention

Operating the Weigh Station outside of the recommended parameters can result in a decrease in performance and/or damage.

## Physical specifications

### Nominal weights and dimensions

	Weight		Height		Depth		Width	
	kg	lbs	cm	in	cm	in	cm	in
<b>G4513A (x2)</b>	3.9	8.6	51	20.1	16	6.3	17	6.7
<b>G8130A</b>	6.8	15	31	12.2	45	17.7	39	15.4
<b>G4529A</b>	20.5	45	21	8	46	18	68	26.5
<b>G4529AA (Total)</b>	27	60	71	28	46	18	68	26.5

## Technical and Environmental

- Indoor use only in ordinary atmospheres
- Altitude up to 4,300 m
- Ambient operating temperature 15 to 35 °C
- Ambient operating humidity 5 to 95%
- Main supply voltage fluctuations up to  $\pm 10\%$  of the nominal voltage
- Pollution degree 2, Installation Cat II
- 7696A is rated for main connection to 100–120 VAC or 220–240 VAC, 50/60 Hz, 180 VA

Instrument description	Line voltage and frequency (V, Hz)	Maximum power consumption (VA)	Maximum power consumption (W)
G4529AA	100–120 VAC or 220–240 VAC, 50/60 Hz,	800 VA	800 W
	Operating temp range	Operating humidity range (%)	Heat Dissipation (BTU)
G4529AA	5 °C to 55 °C 41 °F to 131 °F	80% at 31 °C 80% at 89 °F	

## Safety and Support

- Error indicators show the source operating failure
- Flash memory allows product firmware enhancements to be uploaded using a PC
- Onsite repair is available for the 7696A system
- Onsite performance validation service is available for the 7696A system (including WeighStation)
- In the event of any instrument failures, the Agilent industry-leading Express Exchange\* service can minimize downtime by shipping replacement liquid handling modules within hours

\* Not available in all countries

## For More Information

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