

Agilent 8860 GC – Site Preparation Checklist

Thank you for purchasing an Agilent **instrument**. To get you started and to assure a successful and timely installation, please refer to this specification or set of requirements.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide and checklist** prepared for you that outlines the supplies, consumables, space, and utility requirements for your equipment.

Customer Responsibilities

Ensure that your site meets the following specifications before the installation date. For details, see specific sections within this checklist, including:

- The necessary laboratory or bench space is available.
- The environmental conditions for the site as well as laboratory gases, plumbing and extraction.
- The power requirements related to the product (e.g. number and location of electrical outlets).
- The required operating supplies necessary for the product and installation.
- If Agilent is delivering Installation and Familiarization services, users of the instrument should be present throughout these services. Otherwise, they will miss important operational, maintenance, and safety information.
- For more detailed Site Preparation information, consult the Agilent 8860 Gas Chromatograph Site Preparation Guide.
- Please consult the Special Requirements section for other product-specific information.

Customer Information

1. If you have questions or problems in providing anything described as a Customer Responsibility, please contact your local Agilent or partner support service organization for assistance before the scheduled installation. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your site.
2. Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-arrange any services that have been purchased.
3. Other optional services such as extra training, compliance services and consultation for user-specific applications may also be provided at the time of installation. Please discuss with your Agilent Sales representative before the installation is scheduled.

Important Customer Web Links

- Videos about specific preparation requirements for your instrument can also be found by searching the **Agilent YouTube** channel <https://www.youtube.com/user/agilent>
- To access **Agilent University**, visit <http://www.agilent.com/crosslab/university/> to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.
- A useful **Agilent Resource Center** web page is available, which includes short videos on maintenance, quick lists of consumables for new instruments, and other valuable information. Check out the Resource Page here: <https://www.agilent.com/en-us/agilentresources>
- Need technical support, FAQs, supplies? – visit our **Support Home page** <http://www.agilent.com/search/support>



Dimensions and Weight

Identify the laboratory bench space before your instrument arrives based on the following table.

Pay special attention to the **total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves.**

Special notes

- Requires 30 cm (12-inch) open space above GC.
- Requires 27 cm (10.7-inch) open space in front of GC.
- Requires 25 cm (10-inch) clearance between back of instrument and wall to dissipate hot air and allow for routine maintenance.

Instrument description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
8860 Series GC	50	112	50	19.2	54	21	59	23
8860 Series GC (w/side mount detector)	57	125.4	50	19.2	54	21	68	27



Environmental Conditions

Operating your instrument within the recommended temperature ranges ensures optimum instrument performance and lifetime.

Special notes

- Performance can be affected by sources of heat and cold, e.g., direct sunlight, heating/cooling from air conditioning outlets, drafts, and/or vibrations.
- The laboratory's ambient temperature conditions must be stable for optimum performance.
- During normal operation of the GC with many detector and inlet types, some of the carrier gas and sample vents outside the instrument through the split vent, septum purge vent, and detector exhaust. If any sample components are toxic or noxious, or if hydrogen is used as the carrier gas or detector fuel gas, these exhausts must be vented to a fume hood.

Instrument description	Operating temperature range °C (F)	Operating humidity range (%)	Heat dissipation (BTU)
8860 Series GC	15 to 35 °C	5 to 95%	7681



Power Consumption

Special notes

1. If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
2. 8860 Series GCs require dedicated circuits to operate correctly.

Instrument description	Line voltage and frequency (V, Hz)	Maximum power consumption (VA)	Maximum Current consumption (amps)
8860 Series GC	100 VAC single phase (-10% / +10%) 48-63 Hz	1500	12.5
8860 Series GC	120 VAC single phase (-10% / +10%) 48-63 Hz	2250	18.8
8860 Series GC	200/220/230/240 VAC single phase (-10% / +10%) 48-63 Hz	2250	9.6/9.3/9.3/9.2



Required Operating Supplies by Customer for Installation

Use the following checklist to ensure that the site is properly prepared for GC system installation.

- Ensure that the appropriate installation hardware has been acquired.
- Ensure that the location in which the GC system is being installed meets the requirements for environmental conditions.
- Prepare bench space for the GC system. Ensure that the bench has the size and weight capacity to accommodate the GC and associated components.
- Ensure that system components are oriented so that they can be connected properly.
- If the system being installed includes an MSD, ensure that the bench allows for proper installation and connection of the foreline pump.
- Ensure that appropriate venting is provided for the GC system.
- Ensure that a dedicated power circuit is available for each device in the system.
- Ensure that appropriate gas and reagent supplies are provided for the GC system.
- Ensure that appropriate gas plumbing is provided for the GC system.
- If the GC system being installed includes a data system, ensure that the PC meets the requirements necessary to properly support the GC system. For more information, see the site prep guide for your data system.
- If the GC being installed is to be connected to a site LAN, ensure that the appropriate cabling is available.

Special notes

1. Download the Essential Chromatography and Spectroscopy Supplies Catalogs for a complete overview about available supplies for your new and existing Agilent Instruments
<https://www.agilent.com/en-us/products/lab-supplies>



Special Requirements

Available Kits for 8860 GC system installation:

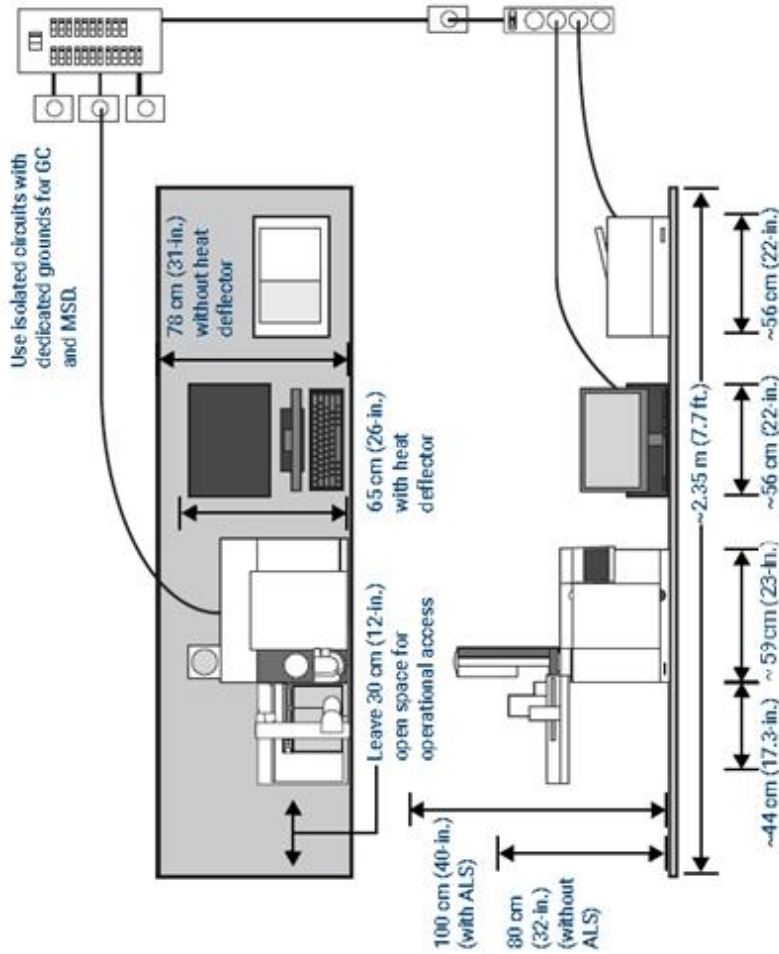
Kit	Part number	Contents
Recommended for GCs with FID, NPD, FPD		
GC Supply Gas Installation Kit with Gas Purifiers	19199N	Includes Gas Clean Filter system kit CP736530 (with 1 oxygen, 1 moisture, and 2 charcoal filters), 1/8-inch brass nuts and ferrules, copper tubing, 1/8-inch brass tees, tubing cutter, 1/8-inch brass caps, universal external split vent trap with replacement cartridges, and 1/8-inch ball valve
Recommended for GCs with TCD/ECD, MS, and MSD		
GC Supply Gas Installation Kit	19199M	Includes 1/8-inch brass nuts and ferrules (20), copper tubing, 1/8-inch brass tees, tubing cutter, 1/8-inch brass caps, 7-mm nut driver, T-10 Torx driver, T-20 Torx driver, 4 open-end wrenches, and 1/8-inch ball valve.
Gas Clean carrier gas filter kit, 1/8-inch	CP17974	

Typical GC System - 8860 GC with computer and printer.

Application	Gas*	Purity	Supply Pressure (psi)†
Carrier	Helium	99.9995	50-80
	Hydrogen	99.9995	50-80
	Nitrogen	99.9995	50-80
Detectors	Helium	99.9995	50-80
	Hydrogen	99.9995	50-80
	Nitrogen	99.9995	50-80
FID, NPD, FPD, TCD	Air	Zero grade	50-80

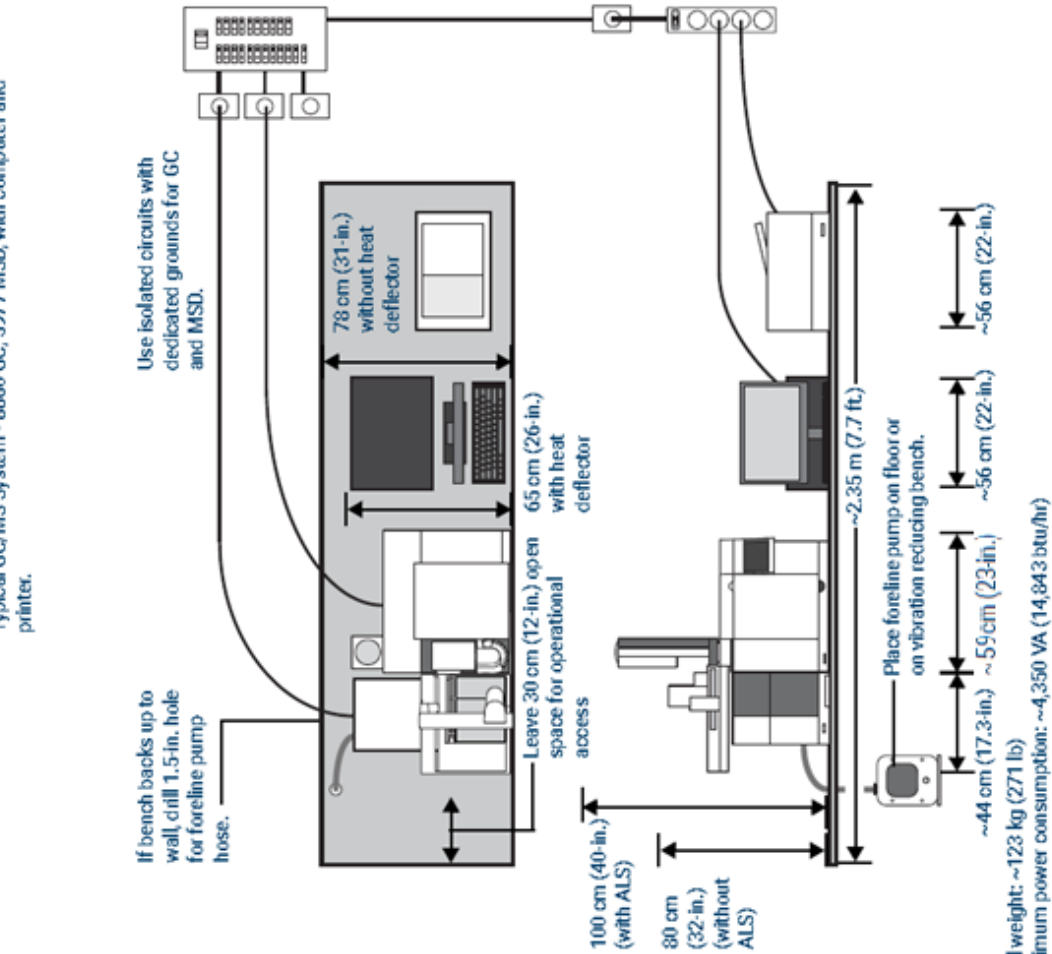
* Use 1/8-in. Swagelok gas connections

† 1 psi = 6.89 kPa








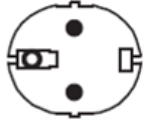
Total weight: ~84 kg (186 lb)
Maximum power consumption: ~3,250 VA (11,090 btu/hr)

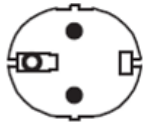
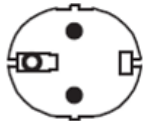





Typical GC/MS System - 8860 GC, 5977 MSD, with computer and printer.








Application	Gas*	Purity	Supply Pressure (psi)†	
Carrier	Helium	99.9995	50 - 80	
	Hydrogen	99.9995	50 - 80	
	Nitrogen	99.9995	50 - 80	
Detectors				
	TCD	Helium	99.9995	50 - 80
	FIQ, NPD, FPD, TCD	Hydrogen	99.9995	50 - 80
ECD, FID, FPD, NPD, TCD	Nitrogen	99.9995	50 - 80	
FIQ, NPD, FPD	Air	Zero grade	50 - 80	

* Use 1/8-in. Swagelok gas connections
† 1 psi = 6.89 kPa

Part Number	Country	Description				Wall Termination	Plug Termination
8120-6978	Chile	240	10	2.5	C13	CEI 23-16	
8121-0070	China	220	16	2.5	C19	GB 1002	
8121-0723	China	220	10	2.5	C13	GB 1002	
8120-3997	Denmark, Greenland	230	10	2.5	C13	AFSNIT 107-2-01	
8120-8622	Denmark, Switzerland	230	16	2.5	C19	Swiss/Denmark 1302	
8120-8621	Europe	220 / 230 / 240	16	2.5	C19	CEE/7/V11	

8121-1222	Korea	220 / 230 / 240	16	2.5	C19	CEE/7/V11	
8121-1226	Korea	220 / 230 / 240	10	2.5	C13	CEE/7/V11	
8121-0710	India, South Africa	240	15	2.5	C19	AS 3112	
8120-5182	Israel	230	10	2.5	C13	Israeli SI32	
8120-0161	Israel	230	16, 16 AWG	2.5	C19	Israeli SI32	
8120-6903	Japan	200	20	4.5	C19	NEMA L6-20P	
8120-8620	United Kingdom, Hong Kong, Singapore, Malaysia	240	13	2.5	C19	BS1363/A	

8120-8705	United Kingdom, Hong Kong, Singapore, Malaysia	240	10	2.3	C13	BS1363/A	
8120-6894	United States	120	20	2.5	C19	NEMA 5-20P	
8120-1992	United States	120	13	2.5	C13	NEMA 5-20P	
8121-0075	United States	240	15	2.5	C19	NEMA L6-15P	
8120-6360	Taiwan, South America	120	20	2.5	C19	NEMA 5-20P	
8121-1301	Thailand	220	15	1.8	C19		