Cary 640/660 FTIR Spectrometer –
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 for your site.

Customer Responsibilities

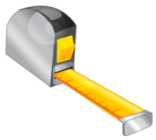
Make sure your site meets the following prior specifications before the installation date. For details, see specific sections within this checklist, including:

- ❑ The necessary laboratory or bench space is available.
- ❑ The environmental conditions for the lab as well as laboratory gases and plumbing.
- ❑ The power requirements related to the product (e.g., number & location of electrical outlets).
- ❑ The required operating supplies necessary for the product and installation.
- ❑ Please consult Other Requirements section below for other product-specific information.
- ❑ For more details, please consult the 600-IR Series Getting Started Manual 8510246800.

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.

Important Customer Information

1. If you have questions or problems in providing anything described as a Customer Responsibilities above, please contact your local Agilent or partner support/service organization for assistance prior to delivery. In addition, Agilent and/or it's partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
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 additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system, but should be contracted separately.



Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below.

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**. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special Notes

1. The workbench should be about 90 cm (36 in) high and rigid enough to support the unpacked weight without warping or sagging. The workbench needs to be flat, level and vibration free.
2. Allow at least two inches of space on both sides, and six inches at the rear of the system to permit free air circulation.
3. Power cord and all other connections are located at the rear of the instrument. The Power switch is located on the rear panel.
4. The Cary 640/660 requires an overhead space of 70cm (28 in).
5. Space to the right of the instrument is required for the computer and related peripherals. It should be no more than 92cm (3 ft) away to accommodate interface cable lengths.
6.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	mm	in	mm	in	mm	In
Cary 640/660 packed	120	265	654	26	1000	40	1164	49
Cary 640/660 unpacked	85	176	365	15	750	31	700	28

Environmental Conditions

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

Special Notes

1. Performance can be affected by sources of heat & cold e.g. direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
2. The site's ambient temperature conditions must be stable for optimum performance.
3. For optimum analytical performance, it is recommended that the ambient temperature of the laboratory be between 20 and 25 °C, and be held constant to within ±2 °C throughout the entire day.

Instrument Description	Operating temp range °C (F)	Operating humidity range (%)	Heat Dissipation (BTU)
Cary 640/660 Non-operating (transit)	5-45 (41-113)	20 to 50	
Cary 640/660 Operating within performance specifications	20 to 26 (68-79)	20 to 50	500 BTU/hr

Power Consumption

Your instrument should be left turned on with Purge Gas flowing 24/7/365 to maintain stable operation and prevent damage to moisture sensitive components.

Special Notes

1. If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
2. A separate power outlet receptacle should be provided for the Cary 640/660 system.
3. Good electrical grounding is essential to avoid potentially serious shock hazards. A 3-wire outlet with ground connection must be provided for the Cary 640/660. Make certain that power outlets are earth-grounded at the grounding pin.
4. All power supplies for the Cary 640/660 must be single-phase, AC voltage, three-wire system (active, neutral, earth) and should be terminated at an appropriate power outlet receptacle that is within reach of the power cord.
5. The use of extension cords or outlet adaptors is not recommended.

Instrument Description	Line Voltage & Frequency (V, Hz)	Maximum Power Consumption (VA)	Maximum Power Consumption (W)
Cary 640/660	90-265 VAC @ 47-63Hz	200VA	160W

Optional Operating Supplies by Customer

Special Notes

1. For information on Agilent consumables, accessories and laboratory operating supplies, please visit http://www.chem.agilent.com/en-US/Products/consumables/Pages/default.aspx
2. A purge gas supply may be required for some models of Cary 640/660 and/or accessories at a initial flow rate of up to 5 litres per minute. Liquid nitrogen (in conjunction with a Heat

exchanger) is recommended because this is generally less costly than compressed nitrogen and is of a better quality. Where compressed Nitrogen must be used, the gas must be dry, oil-free and uncontaminated, with a purity value of 99.996% or better.

3. Unless of Sealed and Desiccated design, purge gas needs to remain 24/7/365 to prevent damage to hydroscopic components within your instrument.
4. Spare sample compartment plates (for multiple accessories), IR sources and Desiccant Canisters are available to order.

Item Description	Vendor's Part Number	Recommended Quantity
Sample Compartment Base plate	0110836090	1 (per accessory)
Mid-IR Source	0110805990	1
Desiccant Canister	899-1794	1

5. If you are using the MCT or InSb variant detectors you will need a supply of Liquid Nitrogen for cooling. Approximately 700ml will be needed to fill each detector.
6. For purging the sample compartment only, the purge gas may need only be cooled to -40°C

Other Requirements

Use of the Cary 640/660 system and accessories may involve materials, solvents and solutions that are flammable, corrosive, toxic or otherwise hazardous.

Careless, improper, or unskilled use of such materials, solvents and solutions can create explosion hazards, fire hazards, toxicity and other hazards which can result in death, serious personal injury, and damage to equipment and property.

ALWAYS ensure that laboratory safety practices governing the use, handling and disposal of such materials are strictly observed. These safety practices should include the wearing of appropriate safety clothing and safety glasses.

The Cary 640/660 weighs in excess of 75 kg. To avoid injury to personnel or damage to equipment, always use two or more people when lifting or carrying the instrument. NEVER attempt to lift the instrument alone.

Unpacking the equipment is your responsibility. As the packages are opened, ensure you received everything you ordered. If there are any discrepancies, notify the supplier. If any items are found to be damaged, immediately notify the carrier and supplier. Any differences from the original order should be referred immediately to your Agilent sales office.

Your Agilent Cary 640/660 spectrophotometer has been designed to comply with the requirements of the Electromagnetic Compatibility (EMC) Directive and the Low Voltage (electrical safety) Directive (commonly referred to as the LVD) of the European Union. Agilent has confirmed that each product complies with the relevant Directives by testing a prototype against the prescribed EN (European Norm) standards.

Important Customer Web Links

- ❑ For additional information about our solutions, please visit our web site at http://www.chem.agilent.com/en-US/Pages/HomePage.aspx
- ❑ Need to get information on your product?
  Literature Library - http://www.agilent.com/chem/library
- ❑ Need to know more?
  Customer Education – http://www.agilent.com/chem/education
- ❑ Need technical support, FAQs? – http://www.agilent.com/chem/techsupp
- ❑ Need supplies? – http://www.agilent.com/chem/supplies

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