

# Agilent xCELLigence RTCA HT - BioSpa Automation System

## Site Preparation Checklist

Thank you for purchasing an Agilent **xCELLigence RTCA HT - BioSpa Automation System**. 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 requirements for your equipment.

## Introduction

### ***Customer Responsibilities***

Ensure that your site meets the following specification 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.

#### **WARNING**

Changing or modifying the HT-BioSpa System safety equipment may prevent the safe operation of the HT-BioSpa System, invalidate its safety compliance, and lead to personal injury or property damage. Any customer who does not use the supplied safety equipment or who modifies the supplied safety equipment assumes full responsibility for providing an appropriate level of safety for its operators and for providing the applicable safety compliance marking and documentation.

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- ☐ Please consult the [Other Requirements](#) section for other product-specific information.

## Customer Information

1. If you have questions or problems in providing anything described as a [Customer Responsibilities](#), 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

- ☐ You can find the product pages here:  
xCELLigence RTCA HT: <https://www.agilent.com/en/product/cell-analysis/real-time-cell-analysis/rtca-analyzers/xcelligence-rtca-ht-high-throughput-model-741229>  
BioSpa: <https://www.biotek.com/products/software-robotics-robotics/biospa-8-automated-incubator/>
- ☐ Need technical support, FAQs, supplies? – visit our [Support Home Page](http://www.agilent.com/search/support) at <http://www.agilent.com/search/support>
- ☐ Get answers. Share insights. Build connections:  
Join the [Agilent Community](https://community.agilent.com/welcome) at <https://community.agilent.com/welcome>

## Site Preparation

### 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.

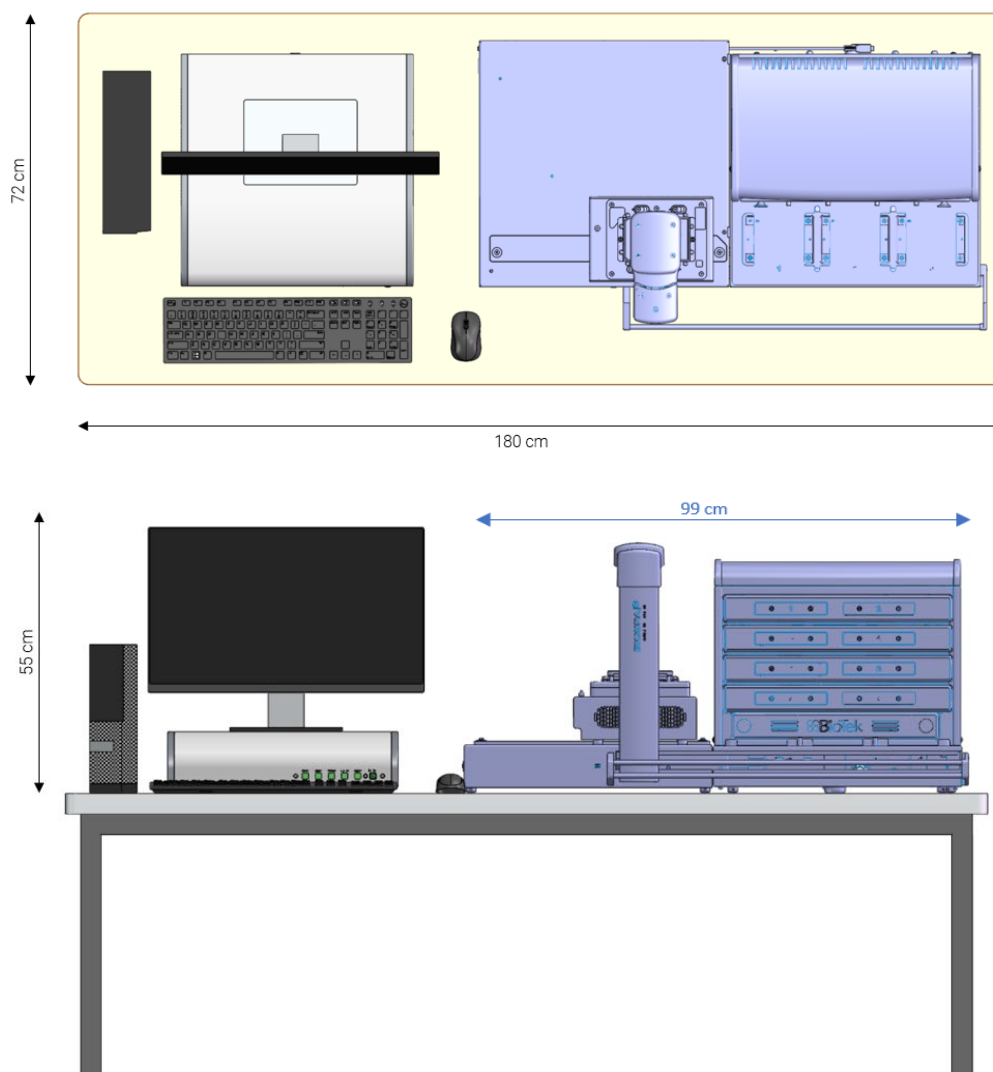
### Special Notes

1. In addition to the dimensions of the HT-BioSpa System, you should plan space for gas tanks (CO<sub>2</sub> and N<sub>2</sub>) for the BioSpa gas model, if applicable.
2. See additional laboratory bench specification under [Other Requirements](#).
3. The total weight of HT-BioSpa System is around 70 kg. For system's layout and dimensions, please refer to [System Layout and Dimensions](#) below.
4. Leave at least 15 cm (6 inches) of space between the instruments rear panel and any other object to make sure there is proper air flow.
5. Please contact Agilent Technical Support for the compatible biosafety cabinet models if you intend to place the HT-BioSpa System into a biosafety cabinet.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	cm	in	cm	in	cm	in
HT Station	10.0	22.0	13.5	5.3	24.0	9.5	16.5	6.5
HT Analyzer	13.6	30.0	11.0	4.3	45.0	17.7	45.0	17.7
BioSpa with fluidics base pan extension	39.0*	85.0*	49.0	19.3	55.0	21.7	99.0	39.0
Workstation	3.9	8.5	29.3	11.5	29.0	11.4	9.3	3.7
Monitor	3.1	6.9	34.8 (compressed)	13.7	16.5	6.5	53.8	21.2

\*with an empty water pan.

### System Layout and Dimensions:



## Environmental Conditions

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

### Special Notes

1. Performance can be affected by sources of heat and cold, for example, direct sunlight, heating/cooling from air conditioning outlets, drafts, and/or vibrations. The laboratory's ambient temperature conditions must be stable for optimum performance.
2. The HT-BioSpa System is intended to operate in a low-vibration environment. Excessive vibration may induce misalignment and robot errors.
3. The HT-BioSpa System is for indoor use only.

Operating Temperature Range	Operating Humidity Range	Pollution Degree
15°C to 30°C (59°F to 86°F)	80% max. up to 25°C 60% max. up to 30°C without condensation	2

## Power Consumption

Instrument Description	Line Voltage and Frequency (V, Hz)	Maximum Power Consumption (VA)
HT Analyzer	100-240V & 50/60 Hz	100
BioSpa with standard base pan extension	100-240V & 50/60 Hz	250
Workstation	100-240V & 50/60 Hz	200
Monitor	100-240V & 50/60 Hz	68

## Required Operating Supplies by Customer for Installation

Item Description	Vendor's Part Number	Recommended Quantity
E-Plate 384 <a href="https://www.agilent.com/en/product/cell-analysis/real-time-cell-analysis/rtca-microplates/rtca-e-plates-759976#relatedproducts">https://www.agilent.com/en/product/cell-analysis/real-time-cell-analysis/rtca-microplates/rtca-e-plates-759976#relatedproducts</a>	5867681001 (Qty: 10) 5867673001 (Qty: 40)	varies

## Other Requirements

### NOTE

It is the customer's responsibility to make sure the following requirements are met before the installation.

### Laboratory Table Specifications

- ☐ The laboratory table must support the weight of the HT-BioSpa System without excessive shaking or movement. The table should be fixed in place, for example, castors that lock.

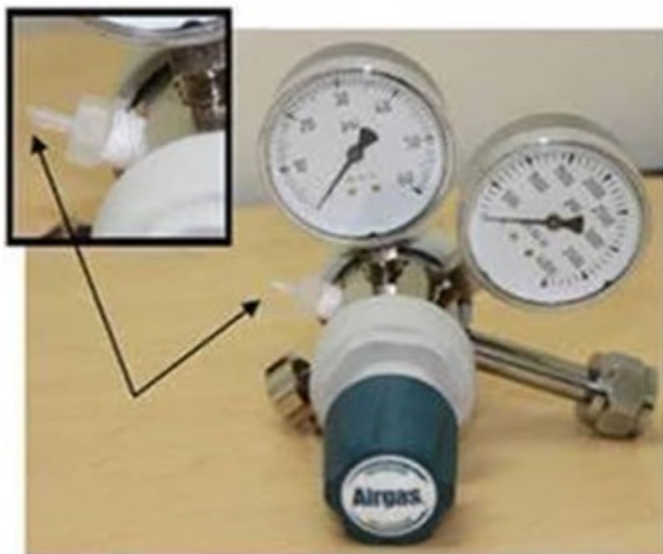
- ☐ The table must be level in direction of the width and the depth of the system. A slight unevenness in the table that holds it can cause the plates to be mishandled.
- ☐ The table surface must have a thickness relative to the material that will prevent warping when HT-BioSpa System and computer are set upon the table.
- ☐ The table surface must be attached to the table frame.

### **Gas Tanks**

- ☐ For BioSpa Gas Control Models (BioSpaG), users can connect CO<sub>2</sub> and N<sub>2</sub> to the system. Gas tanks should not be used in a closed space or with insufficient air circulation to avoid creating an O<sub>2</sub>-deficient or CO<sub>2</sub>-rich atmosphere.
- ☐ All customers must procure, install, and properly secure their own gas tanks.
- ☐ Agilent does not sell gas tanks.

### **Gas-Tank Regulators**

- ☐ All customers must procure and install their own gas tank regulator(s).
- ☐ Regulator(s) should be equipped with a 1/8" barbed tubing adapter installed. Agilent sells regulators for customers in the United States using CGA-compliant connectors. Please see part numbers in the table below.
- ☐ Ensure that regulators for gas tanks are specified to exceed the maximum outlet pressure for the gas tanks to be used.
- ☐ Do not force connections to the gas tanks, and make sure the regulator used is the correct type for your specific gas tank.



Description	Specifications	For U.S. Customers Only
CO <sub>2</sub> Regulator	<ul style="list-style-type: none"> <li>Two-stage regulator</li> <li>Stainless-steel diaphragm</li> <li>Adjustable output, 0-30 psi</li> <li>Outlet connection, barbed for 1/8" tubing</li> </ul>	Agilent sells regulators for customers in the United States using CGA-compliant connectors.
N <sub>2</sub> Regulator	<ul style="list-style-type: none"> <li>Two-stage regulator</li> <li>Stainless-steel diaphragm</li> <li>Adjustable output, 0-30 psi</li> <li>Outlet connection, barbed for 1/8" tubing</li> </ul>	<ul style="list-style-type: none"> <li>CO<sub>2</sub> Regulator, PN 1210514, CGA320</li> <li>N<sub>2</sub> Regulator, PN 1210515, CGA580</li> </ul> Regulators come equipped with an 1/8" tubing adapter installed (PN 01757).

## Computer Requirements

### NOTE

Computer will be supplied by Agilent to operate the HT-BioSpa system.

Below is the computer requirement for RTCA Software Pro (HT-BioSpa):

Operating System: Microsoft Windows 10 64bit

CPU: 2 GHz or faster

RAM: 8 GB RAM

Hard Drive Free Space: Minimum 20 GB

Monitor Resolution: 1920 x 1080 or higher

Microsoft Office Excel required for data export