

Agilent xCELLigence RTCA S16/DP/SP/MP

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.

Introduction

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.
- 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

- 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 cell culture incubator and 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.

CAUTION	1 meter bench space or cart directly adjacent to the incubator for the RTCA Analyzer and the RTCA Control Unit (standard laptop PC). See Figure 1 for an example.
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Figure 1 xCELLigence RTCA system Installation typical placement between incubator and adjacent bench space (Picture shown with RTCA MP Station, RTCA MP Analyzer and standard laptop PC)

Dimension of the RTCA Analyzer (SP/MP): 40.0 x 40.0 x 9.0 cm W x D x H)

The recommended space requirement inside the incubator (when cradle covers are fully opened):

- for RTCA S16 Analyzer: 20.0 x 14.0 x 16.9 cm (W x D x H) See Figure 2.
- for RTCA DP Analyzer: 35.0 x 40.0 x 30.0 cm (W x D x H) See Figure 3.
- for RTCA SP Station: 24.0 x 29.0 x 23.0 cm (W x D x H) See Figure 4.
- for RTCA MP Station: 45.0 x 46.0 x 30.0 cm (W x D x H) See Figure 5.

Environmental Conditions

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

Special notes

- 1 Performance can be affected by sources of heat and cold, e.g., direct sunlight, heating/cooling from air conditioning outlets, drafts, and/or vibrations.

CAUTION

Please avoid installing the RTCA Instruments in the immediate vicinity of other laboratory devices which may influence the highly sensitive electronic readout of the RTCA Instruments (e.g., ultra-centrifuges, autoclaves...).

- 2 The laboratory's ambient temperature conditions must be stable for optimum performance.
- 3 After placing the RTCA Station inside the cell culture incubator, allow proper temperature equilibration by waiting at least two hours before operating the instrument.

Instrument Description (Part Number)	Operating Temperature Range °C (F)	Operating Humidity Range %
RTCA Analyzers (SP/MP) (5228972001)	+15 (59) to +32 (89.6)	80% maximum
Standard laptop PC (5454417001AA)	+15 (59) to +32 (89.6)	80% maximum
RTCA Analyzers (S16/DP) (380601510/5409759001)	+15 (59) to +40 (104)	98% maximum
RTCA Stations (SP/MP) (5229057001/5331625001)	+15 (59) to +40 (104)	98% maximum

Power Consumption

Special notes

- 1 If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
- 2 Two electrical outlets or a power strip is needed to operate the instrument

Instrument Description (Part Number)	Line Voltage and Frequency V, Hz	Maximum Power Consumption W
RTCA Analyzer (SP/MP) (5228972001)	100 – 240 VAC, 50 – 60 Hz	25 W
RTCA Station (MP) (5331625001)	+12 V, +5 V, -5 V (DC)	10 W
RTCA Station (SP) (5229057001)	+12 V, +5 V, -5 V (DC)	10 W
RTCA Analyzer (S16/DP) (380601510/5409759001)	5V (DC)	5 W
Standard laptop PC (5454417001AA)	100 - 240 VAC, 50 - 60 Hz	90 W



Figure 2 xCELLigence RTCA S16 System Components (showing S16 Analyzer with single E-plate 16 position, and standard laptop PC)



Figure 3 xCELLigence RTCA DP System Components (showing DP Analyzer with three E-plate 16/CIM-plate 16 positions, and standard laptop PC)



Figure 4 xCELLigence RTCA SP Combo System Components (showing SP Station with single E-plate 96 position, SP Analyzer and standard laptop PC)



Figure 5 xCELLigence RTCA MP Combo System Components (showing MP Station with multiple E-plate 96 positions, MP Analyzer and standard laptop PC)

Required Operating Supplies by Customer for Installation

Special notes

- 1 Routine laboratory PPE supplies, as well as lint-free paper towels (such as Kimwipe tissue paper) and 70-80% ethanol are needed for instrument cleaning during installation.
- 2 Please refer to the xCELLigence RTCA E-plates Product Page for a complete overview about available supplies for your new and existing Agilent Instruments:
<https://www.agilent.com/en/product/cell-analysis/real-time-cell-analysis/rtca-microplates/rtca-e-plates-759976>

Special Requirements

CAUTION	Due to the high sensitivity of the electronic components inside the RTCA S16/DP Analyzer and RTCA SP/MP Station, the use of cell culture incubators with pure copper interiors is highly discouraged.
CAUTION	95% Relative Humidity should be assured inside the cell culture incubator to allow experiments to be run in physiological condition and for an extended period (days). Proper humidification and reducing the time the incubator door remains open during an experiment will reduce medium evaporation.

Equipment positioning on the bench.

The Cell Culture Incubator where the RTCA S16/DP/SP/MP Station is housed should be in proximity of the bench or table, due to the limited length of the EPS cable (10 ft) which connects SP/MP Station to the SP/MP Analyzer; or USB cable (6 ft) which connects S16/DP Analyzer to the standard laptop PC (Please refer to Figures 2-5).

Waste liquid and gas management.

The Cell Culture Incubator should be connected to a CO2 supply line to allow experiments to be run in physiological condition and for an extended period (days).