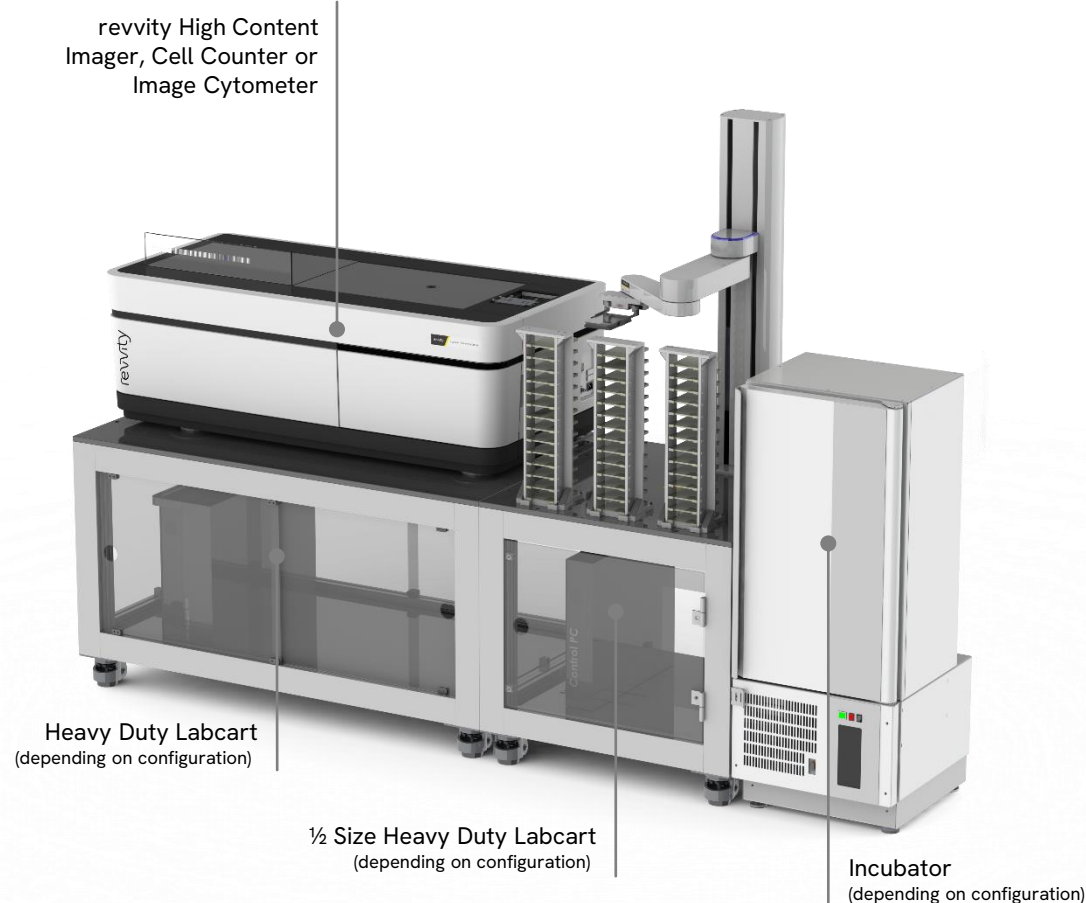# plate::handler™ FLEX

Automated Plate Loading Solutions for revvity High-Content Imagers, Cell Counters and Image Cytometers

Increase throughput, flexibility and walkaway time of your imaging and cell counting workflows by adding robotic plate loading automation to your revvity Imager, Cell Counter or Image Cytometer.

SPECIFICATIONS

Robotic Arm	Collaborative, four-axis SCARA robot supporting side-by-side human-robot cooperation, build-in servo gripper enabling microplate handling in both landscape and portrait formats. Maximum reach: 731mm; maximum z-travel: 750mm; repeatability: 0.2mm
Plate Storage Capacity & Conditions	Up to 42 (63) x shallow well plates (max. height incl. lid 23mm) in random access racks. *For configurations with incubator (in addition to above):* Up to 44x 96/384w SW plates in Liconic® STX44 IC SA robotic incubator (32-50°C, 0-10% CO_2, max. 95% RH)
Control Software	plate::works™ software 6.30 or better with job::manager
Application Templates	1. Reading a variable number of plates using a fixed method or experiment (selected from drop-down menu) 2. Reading a variable number of plates with two subsequent experiments (PreciScan™ plug in – where supported) 3. Reading a variable number of plates using plate specific experiments (with experiment from an Excel worklist) 4. Multiple runs (as per above) to be started at specific dates and times (per a calendar view)
Control PC	19'' industrial PC running Windows 10 Enterprise IoT LTSB supporting medical and/or mission critical applications
Barcode Reader	SICK CLV601, for reliable barcode reading in laboratory automation
Electrics / Power consumption	1-phase 230V/50Hz (110V/60Hz) / ~200W (Robot + PC)

revvity High Content Imager, Cell Counter or Image Cytometer

Heavy Duty Labcart (depending on configuration)

½ Size Heavy Duty Labcart (depending on configuration)

Incubator (depending on configuration)

revvity

plate::handler™ FLEX

BENEFITS

- **Peace-of-mind:** Automation and Imaging provided, supported and serviced out-of-one hand, with a single point of contact. plate::handler™ FLEX developed to complement our High-Content Imagers and Image Cytometers.

- **Easy-to-use:** "Ready-to-use" application templates covering all major use cases included with system.

- **Free-up resources, increase utilization and safeguard results:** Supports autonomous 24x7 plate processing with plates to be imaged in sequence, in loops (kinetic studies) or following user-defined schedules (calendar entries), using either a fixed imaging protocol or plate/user-specific protocols taken from a worklist. Full barcode tracking.

- **Enables shared equipment use,** with software enabling users to queue plates for imaging with user-specific methods and adjustable priorities.

- **Grows with your needs:** Seamless upgrade path with plate::handler™ FLEX sharing the same hardware & software components as our larger full-workflow automation platforms.

revvity

HH20200010

Benchtop Fixed Cell Imaging Package for Operetta® CLS™ High-Content Analysis System

Included in package:
• plate::handler™ Flex robot, control PC and scheduling software
• Random access plate racks to store up to 42x 96/384w SW plates
• Barcode reader
• Mounting parts for robot and imager (imager not included)
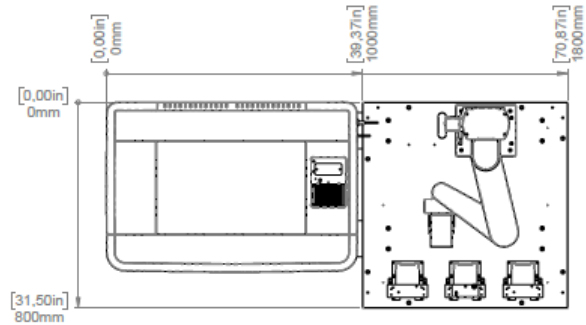

ORDERING INFORMATION

HH20200010	plate::handler™ Flex benchtop fixed cell package for Operetta CLS
HH20110069	On-Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20220006	Enclosure for robot

21-position racks (optional item)

Enclosure (optional item)

DIMENSIONS

revvity

HH20220005

Benchtop Live Cell Imaging Package for Operetta® CLS™ High-Content Analysis System

Included in package:

- plate::handler™ Flex robot, control PC and scheduling software
- Random access plate racks to store up to 42x 96/384w SW plates
- Liconic® STX44 IC incubator (44x 96/384 SW plates, 32-50°C, high RH, 0-10% CO_2)
- Barcode reader
- Mounting parts for robot, incubator and imager (imager not included)

ORDERING INFORMATION

HH20220005	plate::handler™ Flex benchtop live cell package for Operetta CLS with incubator
HH20110069	On-Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20220006	Enclosure for robot

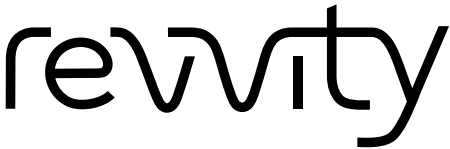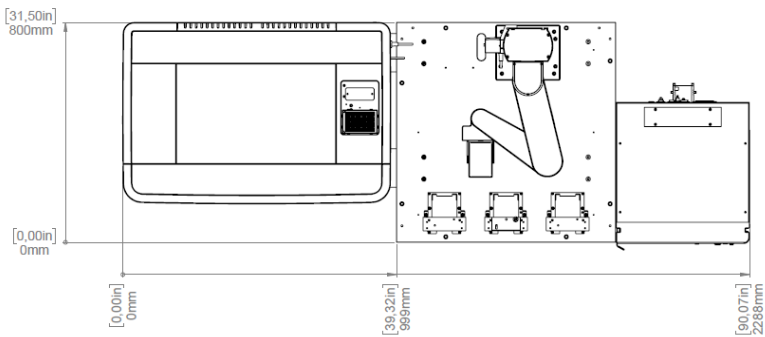21-position racks (optional item)

Enclosure (optional item)

DIMENSIONS

[31,50in] 800mm

[0,00in] 0mm

[0,00in] 0mm [39,32in] 999mm [90,07in] 2288mm

revvity

HH20200011

Fixed Cell Imaging for Operetta® CLS™ or Opera Phenix® Plus High-Content Analysis System

Included in package:

- plate::handler™ Flex robot, control PC and scheduling software
- Table for robot (table for imager to be purchased separately)
- Random access plate racks to store up to 42x 96/384w SW plates
- Barcode reader
- Mounting parts for robot, incubator and imager (imager not included)

ORDERING INFORMATION

HH20200011	plate::handler™ Flex standalone fixed cell package for Phenix/CLS
HH20110151	Heavy-duty lab cart (mandatory item if not quoted with Imager or existing)
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

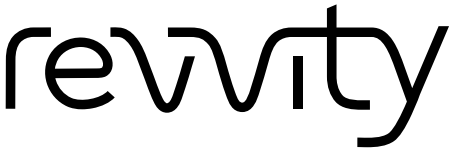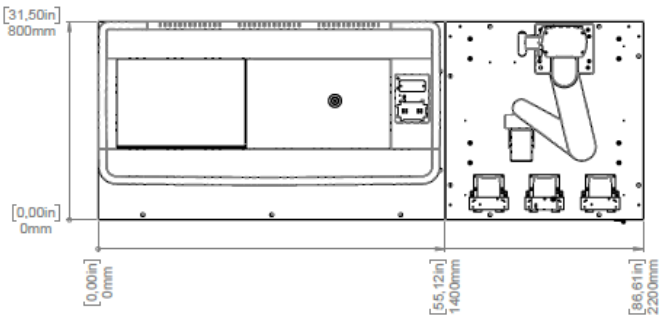|	
HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20220006	Enclosure for robot

21-position racks (optional item)

Enclosure (optional item)

DIMENSIONS

[31,50in] 800mm

[0,00in] 0mm

[0,00in] 0mm   [55,12in] 1400mm   [86,61in] 2200mm

revvity

For research use only. Not for use in diagnostic procedure

HH20200012

Live Cell Imaging for Operetta® CLS™ or Opera Phenix® Plus High-Content Analysis System

Included in package:
- plate::handler™ Flex robot, control PC and scheduling software
- Table for robot (table for imager to be purchased separately)
- Random access plate racks to store up to 42x 96/384w SW plates
- Liconic® STX44 IC, incubator (44x 96/384w SW plates, 32-50°C, high RH, 0-10% CO_2)
- Barcode reader
- Mounting parts for robot, incubator and imager (imager not included)

ORDERING INFORMATION

HH20200012	plate::handler™ Flex standalone live cell package for Phenix/CLS with incubator
HH20110151	Heavy-duty lab cart (mandatory item if not quoted with Imager or existing)
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

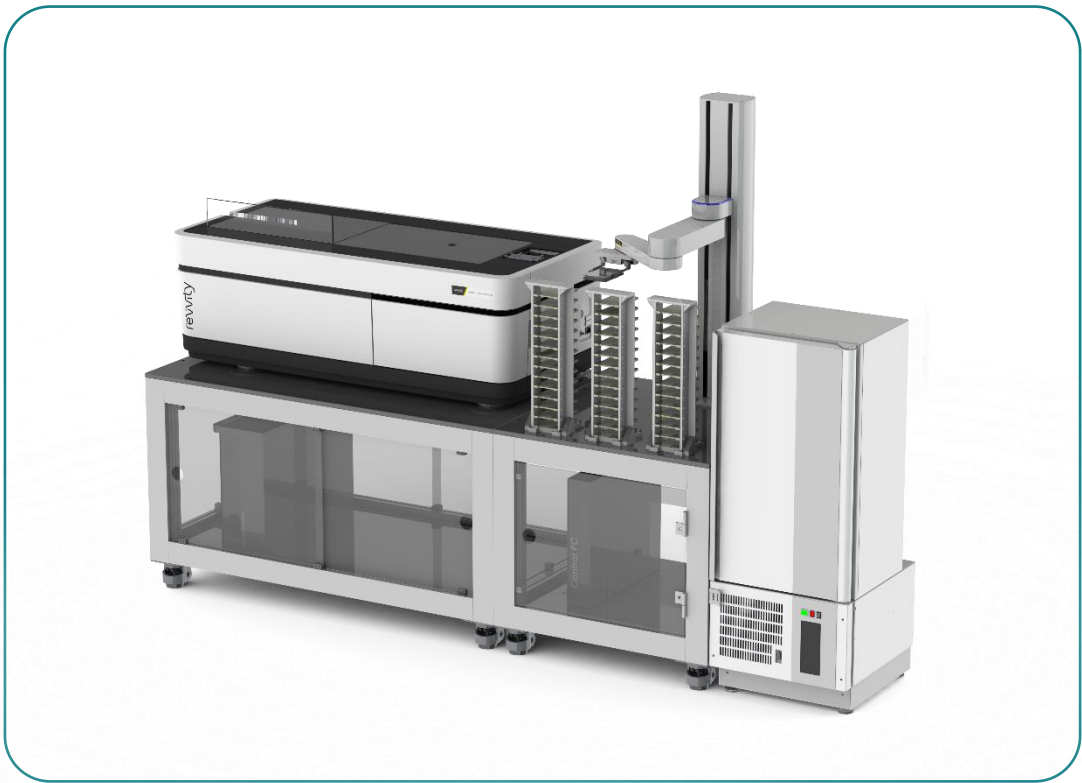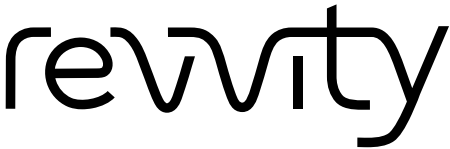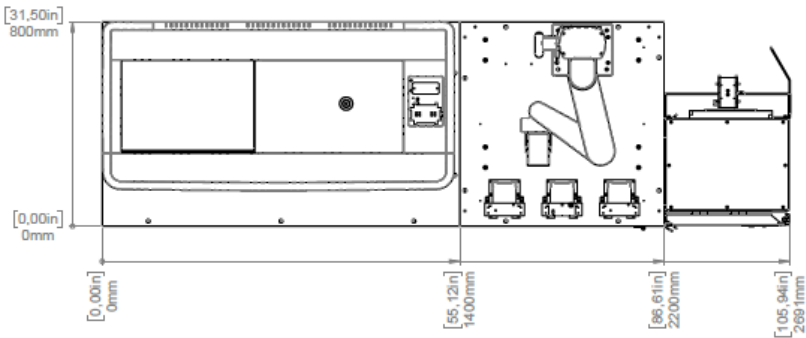|	
HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20220006	Enclosure for robot

21-position racks (optional item)

Enclosure (optional item)

DIMENSIONS

![revvity logo]

HH20200013

Fixed Cell Imaging for Opera Phenix® Plus with onboard Liquid Handling Option*)

Included in package:
- plate::handler™ Flex robot, control PC and scheduling software
- Table for robot (table for imager to be purchased separately)
- Random access plate racks to store up to 42x 96/384w SW plates
- Barcode reader
- Mounting parts for robot and imager (imager not included)
- Enclosure

ORDERING INFORMATION

HH20200013	plate::handler™ Flex standalone fixed cell package for Phenix with LH
HH20110151	Heavy-duty lab cart (mandatory item if not quoted with Imager or existing)
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

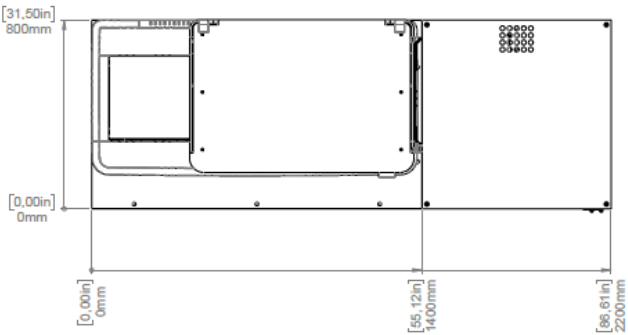|	
HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20110050	Lid handler (to remove lids for liquidhandling), needs HH20110054
HH20110054	Vacuum pump for Lid Handler (mandatory item for lidhandler)

21-position racks (optional item)   lid handler (optional item)

DIMENSIONS

[31,50in] 800mm
[0,00in] 0mm
[0,00in] 0mm   [55,12in] 1400mm   [86,61in] 2200mm

revvity

*) plate::handler to load imaging plates only. Please contact revvity for configurations supporting storage and automated loading of compound plates and tip boxes

HH20200014

Live Cell Imaging for Opera Phenix® Plus with onboard Liquid Handling Option*)

Included in package:
- plate::handler™ Flex robot, control PC and scheduling software
- Table for robot (table for imager to be purchased separately)
- Random access plate racks to store up to 42x 96/384w SW plates
- Liconic® STX44 IC, incubator (44x 96/384w SW plates, 32-50°C, high RH, 0-10% CO_2)
- Barcode reader
- Mounting parts for robot, incubator and imager (imager not included)
- Enclosure

ORDERING INFORMATION

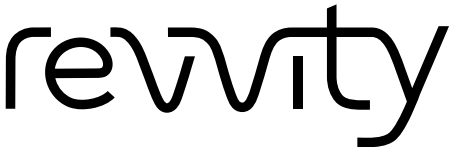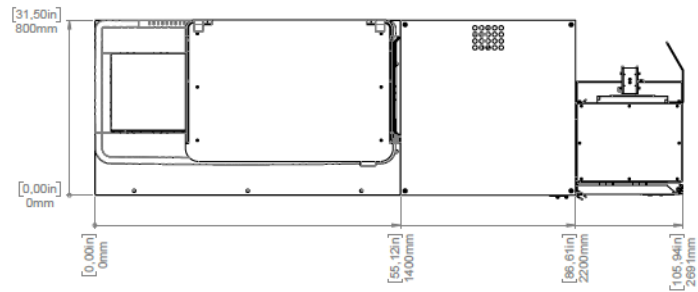|	
HH20200014	plate::handler™ Flex standalone live cell package for Phenix with LH with incubator
HH20110151	Heavy-duty lab cart (mandatory item if not quoted with Imager or existing)
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20110050	Lid handler (to remove plate lid for liquidhandling)), needs HH20110054
HH20110054	Vacuum pump for Lid Handler (mandatory item)

21-position racks (optional item)

DIMENSIONS

[31,50in] 800mm
[0,00in] 0mm
[0,00in] 0mm
[55,12in] 1400mm
[86,61in] 2200mm
[105,94in] 2691mm

revvity

For research use only. Not for use in diagnostic procedure

*) plate::handler to load imaging plates only. Please contact revvity for configurations supporting storage and automated loading of compound plates and tip boxes

HH20220001

Benchtop Plate Feeding Package for Nexcelom Celigo or Cellaca

Included in package:
- plate::handler™ Flex robot, control PC and scheduling software
- Random access plate racks for up to 42x 6 to 384w SW plates, height with lid <23mm
- Barcode reader
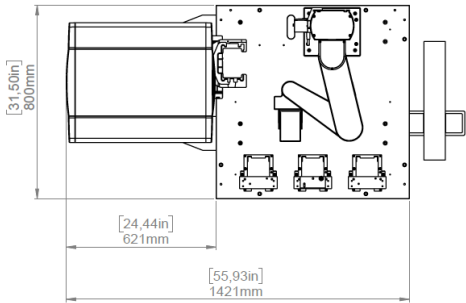- Mounting parts for robot and imager (imager not included)

ORDERING INFORMATION

HH20220001	plate::handler™ Flex benchtop plate feeding package for Celigo/Cellaca
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HHCUSHTSMISC	Celigo to be placed right of robot (free of charge)
HH20220006	Enclosure for robot

21-position racks (optional item)

Enclosure (optional item)

DIMENSIONS

[31.50in]
800mm

[24,44in]
621mm

[55,93in]
1421mm

revvity

HH20220003

Benchtop Plate Feeding Package for Nexcelom Celigo or Cellaca with incubator

Included in package:

- plate::handler™ Flex robot, control PC and scheduling software
- Random access plate racks for up to 42x 6 to 384w SW plates, height with lid <23mm
- Liconic® STX44 IC, incubator (44x 96/384w plates, 32-50°C, high RH, 0-10% CO_2), cassettes for 24w and DW plates as optional items
- Barcode reader
- Mounting parts for robot, incubator and imager (imager not included)

ORDERING INFORMATION

HH20220003	plate::handler™ Flex benchtop plate feeding package for Celigo/Cellaca with incubator
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

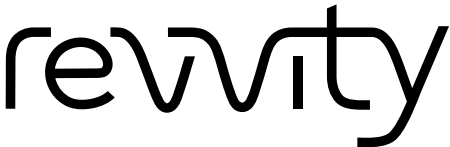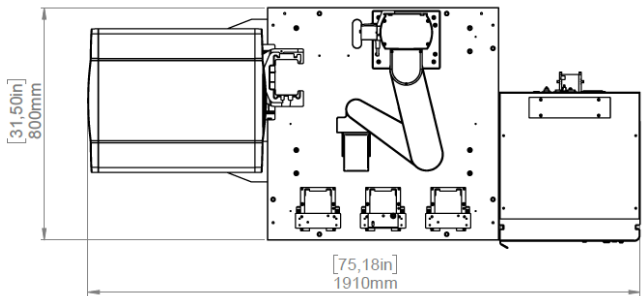|	
HH20220007	Higher Capacity Ambient Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20220006	Enclosure for robot
HHCUSHTSMISC	DW Cassettes (holding 20x DW plates height up to 44mm) for incubator. DW cassettes to replace 96/384w SW plate cassettes incl. in HH20220003, no extra charge
HHCUSHTSMISC	Custom 24w Cassettes (holding 28x 24/96/384w plates) for incubator. DW cassettes to replace 96/384w SW plate cassettes incl. in HH20220003, please enquire about price

21-position racks
(optional item)

Enclosure
(optional item)

Alternative plates cassettes
for incubator (optional items)

DIMENSIONS

[31,50in]
800mm

[75,18in]
1910mm

revvity

HH20220002

Standalone Plate Feeding Package for Nexcelom Celigo or Cellaca

Included in package:
- plate::handler™ Flex robot, control PC and scheduling software
- Table for robot (table for imager to be purchased separately)
- Random access plate racks for up to 42x 6 to 384w SW plates, height with lid <23mm
- Barcode reader
- Mounting parts for robot and imager (imager not included)

ORDERING INFORMATION

HH20220002	plate::handler™ Flex benchtop plate feeding package for Celigo/Cellaca
HH20220010	Half-size Heavy-duty lab cart (mandatory item)
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training, as required

Optional Items

HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20220006	Enclosure for robot

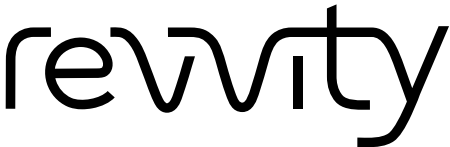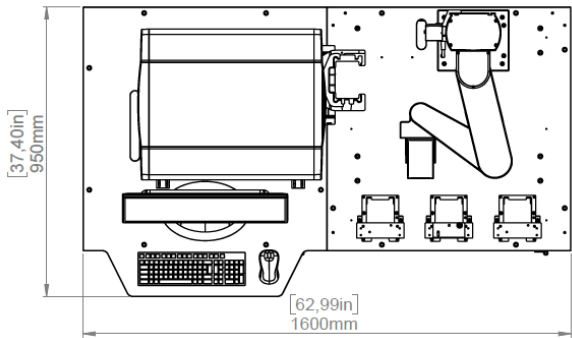21-position racks (optional item)

Enclosure (optional item)

DIMENSIONS

[37,40in] 950mm

[62,99in] 1600mm

revvity

HH20220004

Standalone Plate Feeding Package for Nexcelom Celigo or Cellaca with incubator

Included in package:
- plate::handler™ Flex robot, control PC and scheduling software
- Table for robot (table for imager to be purchased separately)
- Random access plate racks for up to 42x 6 to 384w SW plates, height with lid <23mm
- Liconic® STX44 IC, incubator (44x 96/384 SW plates, 32-50°C, high RH, 0-10% CO_2)
- Barcode reader
- Mounting parts for robot, incubator and imager (imager not included)

ORDERING INFORMATION

HH20220004	plate::handler™ Flex benchtop plate feeding package for Celigo/Cellaca with incubator
HH20220010	Half-size Heavy-duty lab cart (mandatory item)
HH20110069	On Site Installation (mandatory item), 1 day
2770001	Level 3 Support Application Development & Training

Optional Items

HH20220007	Higher Capacity Racks (3x 14 position racks to be replaced with 3x 21 position racks)
HH20220006	Enclosure for robot
HHCUSHTSMISC	DW Cassettes (holding 20x DW plates height up to 44mm) for incubator. DW cassettes to replace 96/384 SW plate cassettes incl. in HH20220003, no extra charge
HHCUSHTSMISC	Custom 24w Cassettes (holding 28x 24/96/384w plates) for incubator. DW cassettes to replace 96/384w SW plate cassettes incl. in HH20220003, please enquire about price

21-position racks
(optional item)

Enclosure
(optional item)

Alternative plates cassettes
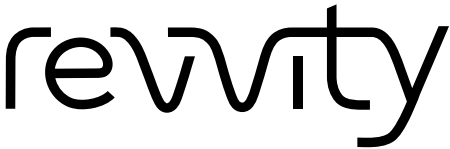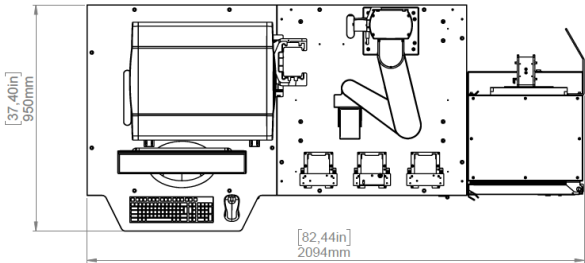for incubator (optional items)

DIMENSIONS

[37,40in]
950mm

[82,44in]
2094mm

revvity

plate::handler™ FLEX

LINEAR UPGRADE PATH TO explorer™ G3 workstation

plate::handler™ FLEX
Plate Feeding Solutions ⟩⟩ explorer™ G3 workstation
Full Workflow Automation

revvity