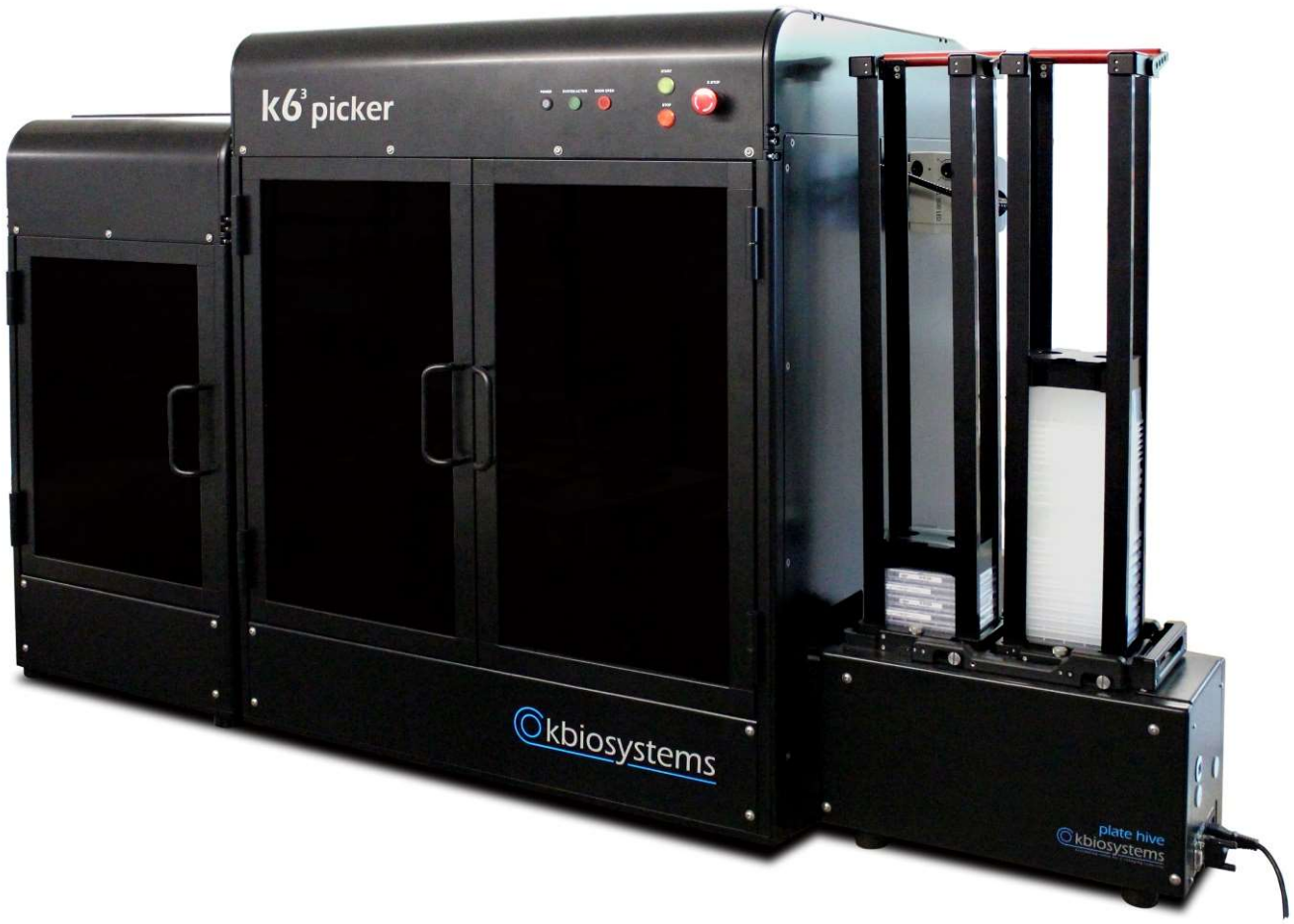
KBIOSYSTEMS
porvair

K6³ Colony Picking System



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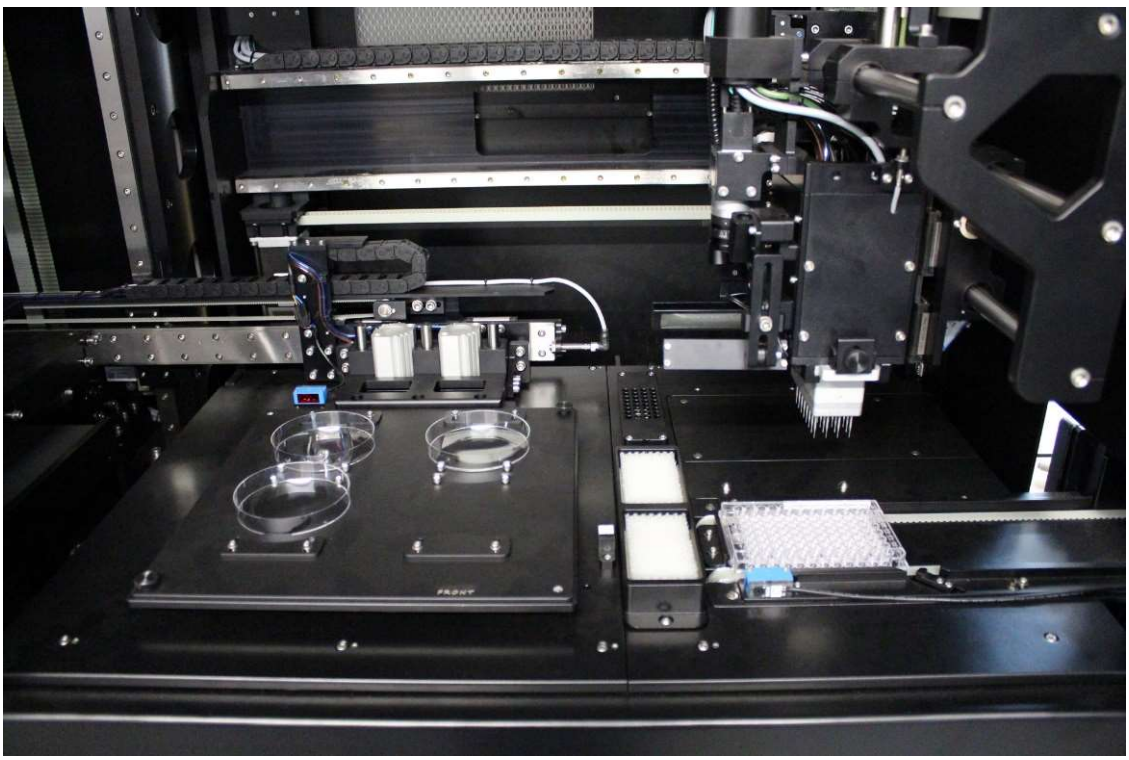
Kbiosystems K6³ automated colony picking systems offer the ideal entry level automation laboratories require for a reliable, consistent identification and extraction system for sample recovery.

Offering complete versatility, the K6³ Series will work with a wide range of plates for both source and destination, such as Micro Plates. 96,384 shallow and deep well formats, Petri Dishes from 4 to 15cms, Omni style Trays, Multi Well Growth plates, to Bio Assay trays.

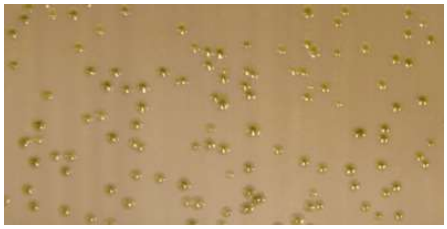
Kbiosystems K6³ colony picker range in size and throughput ability, offering the user the ability to step up from hand picking to first stage automation. Or low throughput production style systems. This modular system allows easily to increase system capacity with simple upgrades to source and destination capacities.

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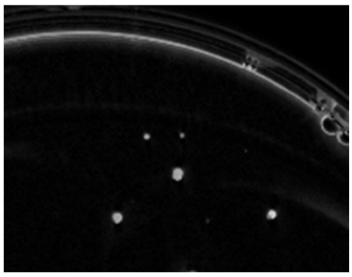
Picking accuracy allows us to reach in excess of 98.5%.
Use of different pin types allow transfer volumes to be defined. All pins are manufactured in 316 Stainless steel for ease of cleaning and repetitive use.



System drive now has full positional feedback to improve accuracy and speed.
Imaging is carried out via a USB3 camera system allowing the software algorithms to detect monochromatic scale for standard picking and optional colour differential between emitting organisms if required.
By fitting optional fibre optic fluorescent excitation light source and emission camera filters multiple dye ranges can be visualised.



Visual



Fluorescent

Platform cleanliness:
All systems are supplied with Ultraviolet germicidal irradiation (UVGI) is a disinfection method that uses short-wavelength ultraviolet (UV-C) light to kill or inactivate microorganisms by destroying nucleic acids and disrupting their DNA, leaving them unable to perform vital cellular functions.
HEPA filtration, our standard H11 grade filter offers > 95% filtration against MPPS particles, (higher filtration levels available on request).

K6³ Key Features:

- Kbiosystems latest in our modular series colony picker platform
- Software operations:
    - Colony identification
        - Visual
        - Fluorescent
        - Halo
        - Colour (Blue / White)
    - Process operation:
        - Colony picking
            - Isolation extraction of single growth points from a growth plate
            - Determination of size, proximity to adjacent growths, shape of growth
            - Blue white differentiation
            - Fluorescent expression isolation
            - Bacterial interaction with growth media (Halo)
            - Multiple assay type growth recognition.
        - Duplicate inoculation
            - Offers the ability to make original inoculation plus second plate validation inoculation dips to destination plates

K6³ Key Features:

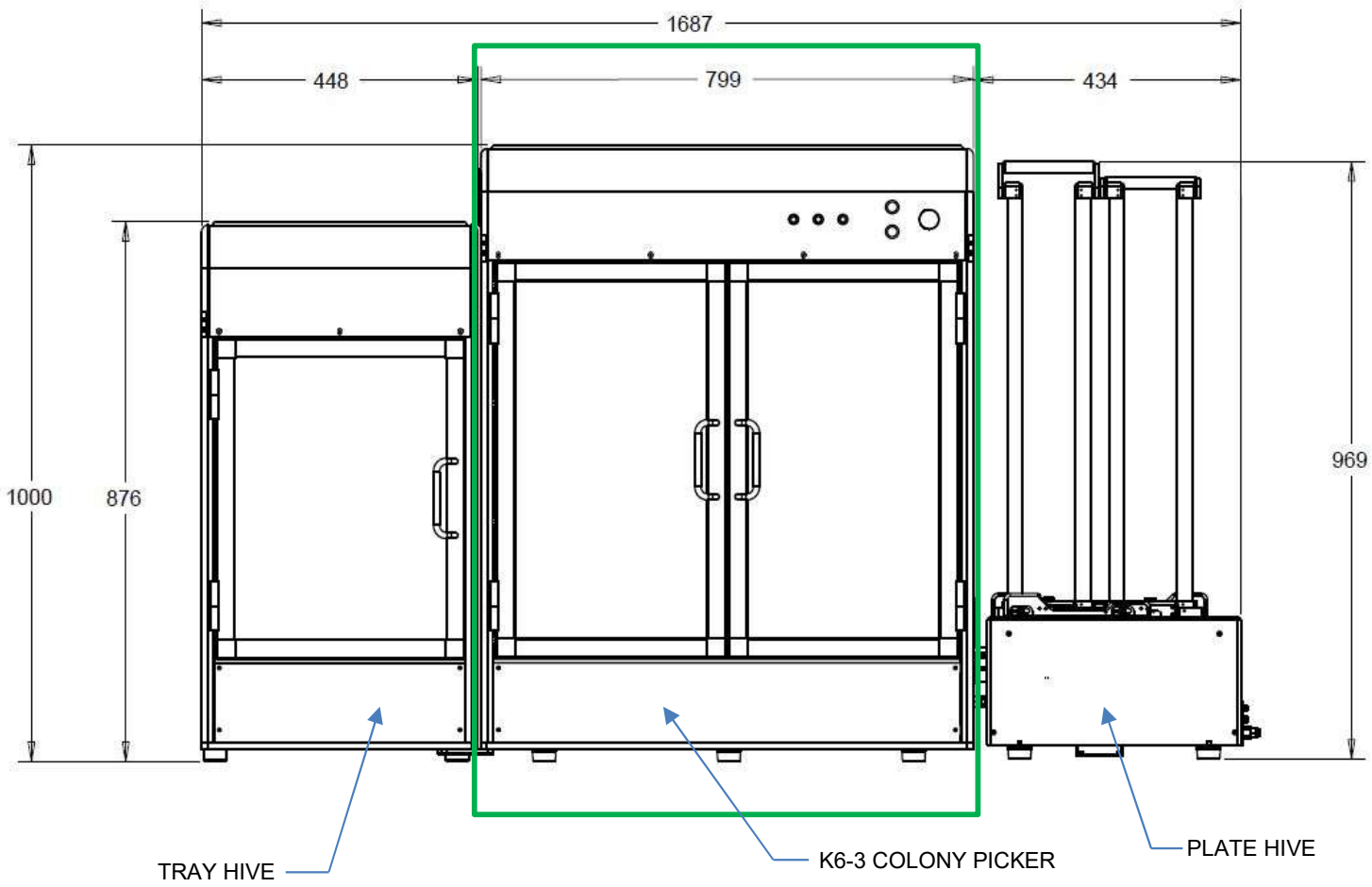
- Kbiosystems latest in our modular series colony picker platform
- Software operations:
    - Process operation:
        - Re Arraying
            - By use of barcode identification pre-grown original inoculate isolated growth plates in 96 or 384 format can then be used as mother plates for the separate isolation of specific wells of interest to form a final process consolidated master plate (s)
        - Replication
            - Use of either 96 or 384 reusable stamping tools the master mother plate can be directly replicated in to a definable number daughter copy plates, this can also be used for expansion or consolidation from 384 and 96 plates.
        - Direct copy arraying
            - Use of either 96 or 385 stamping tools the mother plates can be arrayed onto membranes or direct media contact growth trays in a defined format array.
        - Timed UV sterilisation
            - Internal germicidal UV lighting can be used for cabinet sterilisation
    - Specialised process software available on request

K6³ Key Features:

- 3rd Generation of Kbiosystems K6³ series colony picker platform
- Now closed loop control to drive system ensuring positional accuracy and improved operation
- Picking speeds up to 1000 colonies per hour including wash cycle using 32 pin picking head
- Now has two destination locations on standard platform
- New camera systems giving dynamic analysis feedback during imaging for improved selection
- Barcode data collection as standard
- Germicidal UV standard
- Option to fit HEPA filter
- New twin destination hive lanes giving greater throughput or duplication inoculation
- New cover system to improve light control and aesthetics
- Integration ready software to allow system control via third party schedulers
- System operational bench available
- Improved fluorescent image analysis
- Improved halo image analysis
- Simple set up
- Quieter drive system

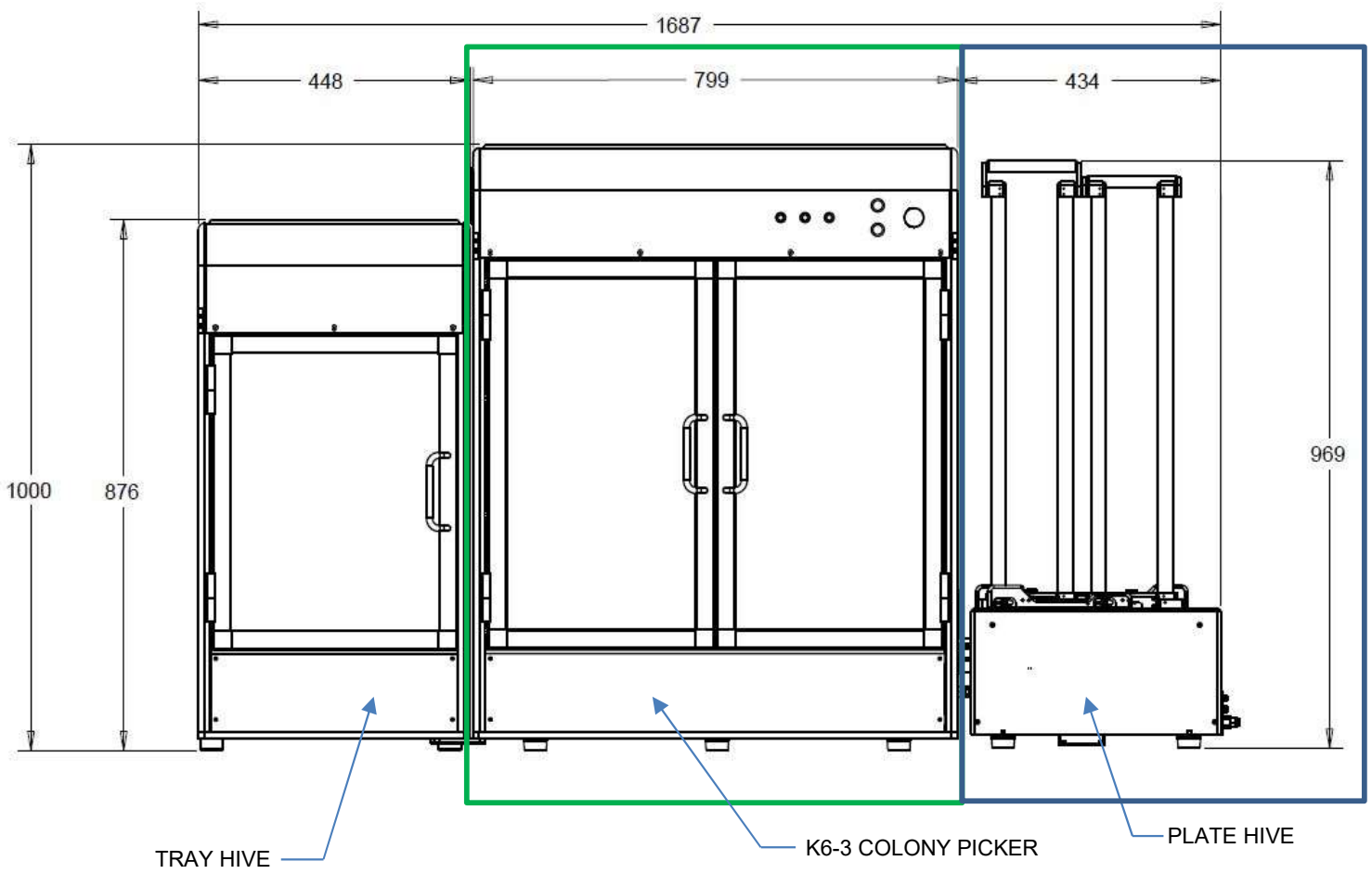
K6³ Dimensions:

System layout options:
The system is available in 3 configurations:
a. Picker only (Green Section Only)



K6³ XT Dimensions:

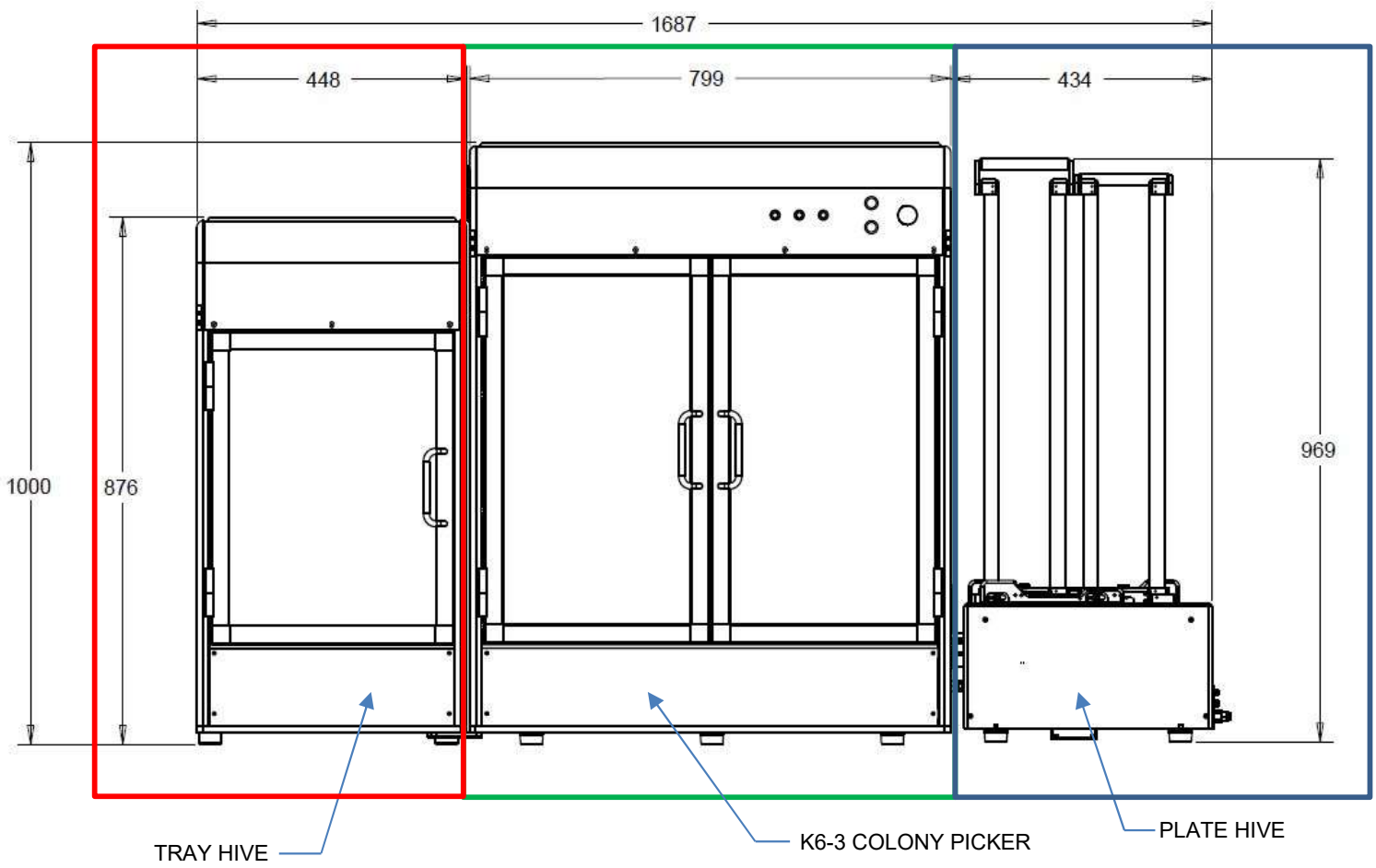
System layout options:
The system is available in 3 configurations:
b. Picker with automated destination plates, single or Dual lane (Green and Blue Section Only)



K6³ XL Dimensions:

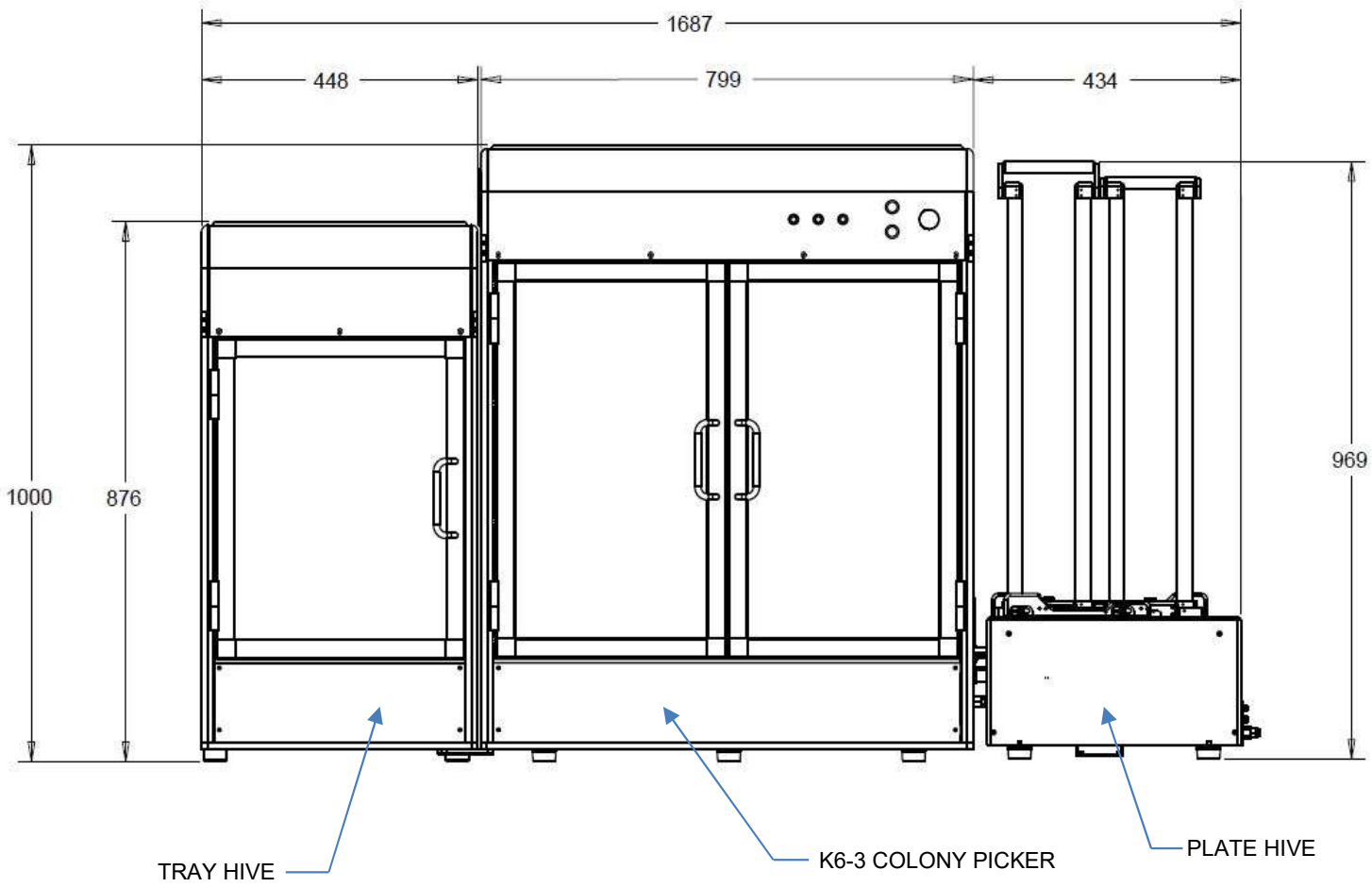
System layout options:
The system is available in 3 configurations:

c. Picker with automated Source trays and destination plates single or Dual lane (Red, Green and Blue Section Only)



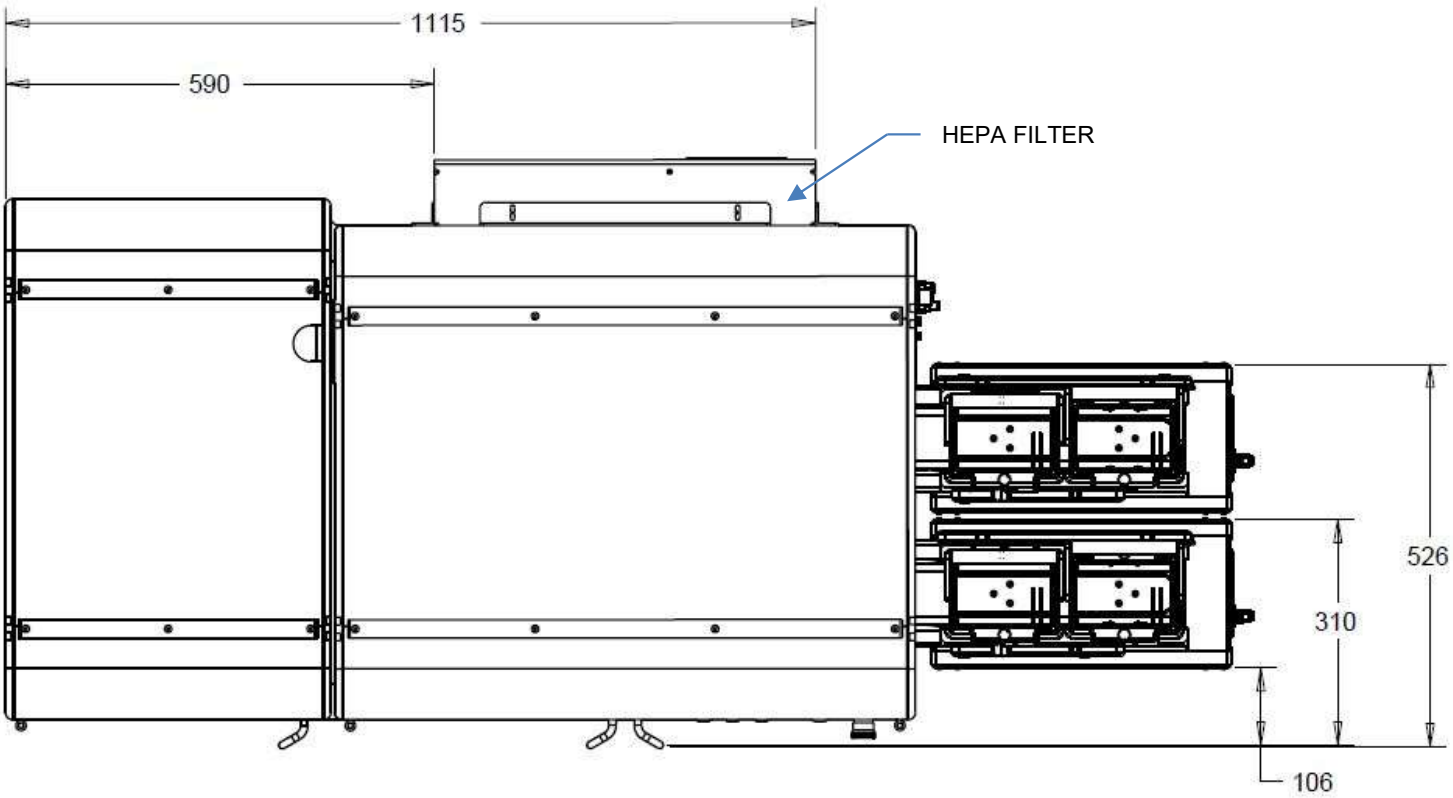
K6³ Dimensions:

FRONT VIEW:



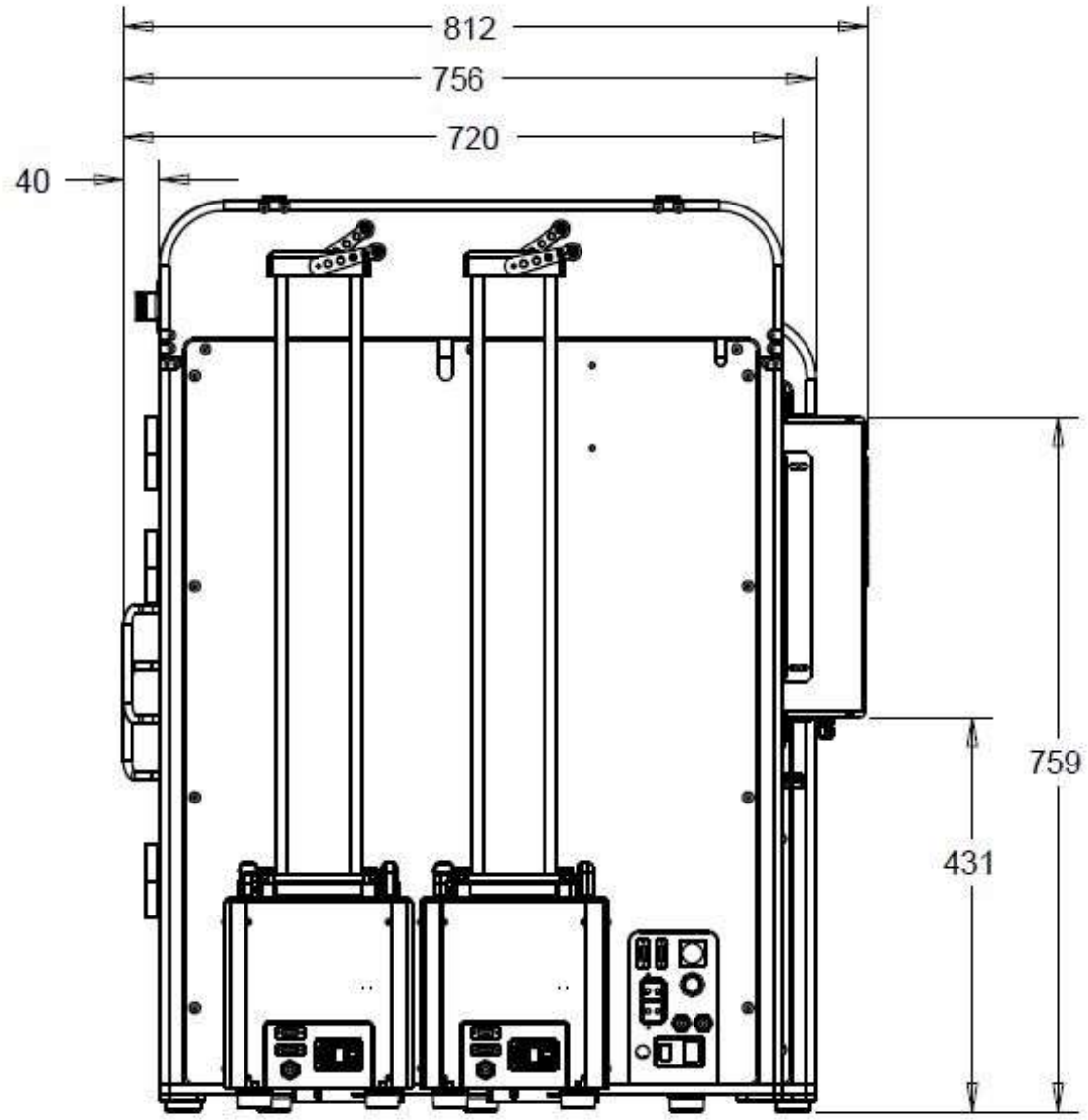
K6³ Dimensions:

PLAN VIEW:



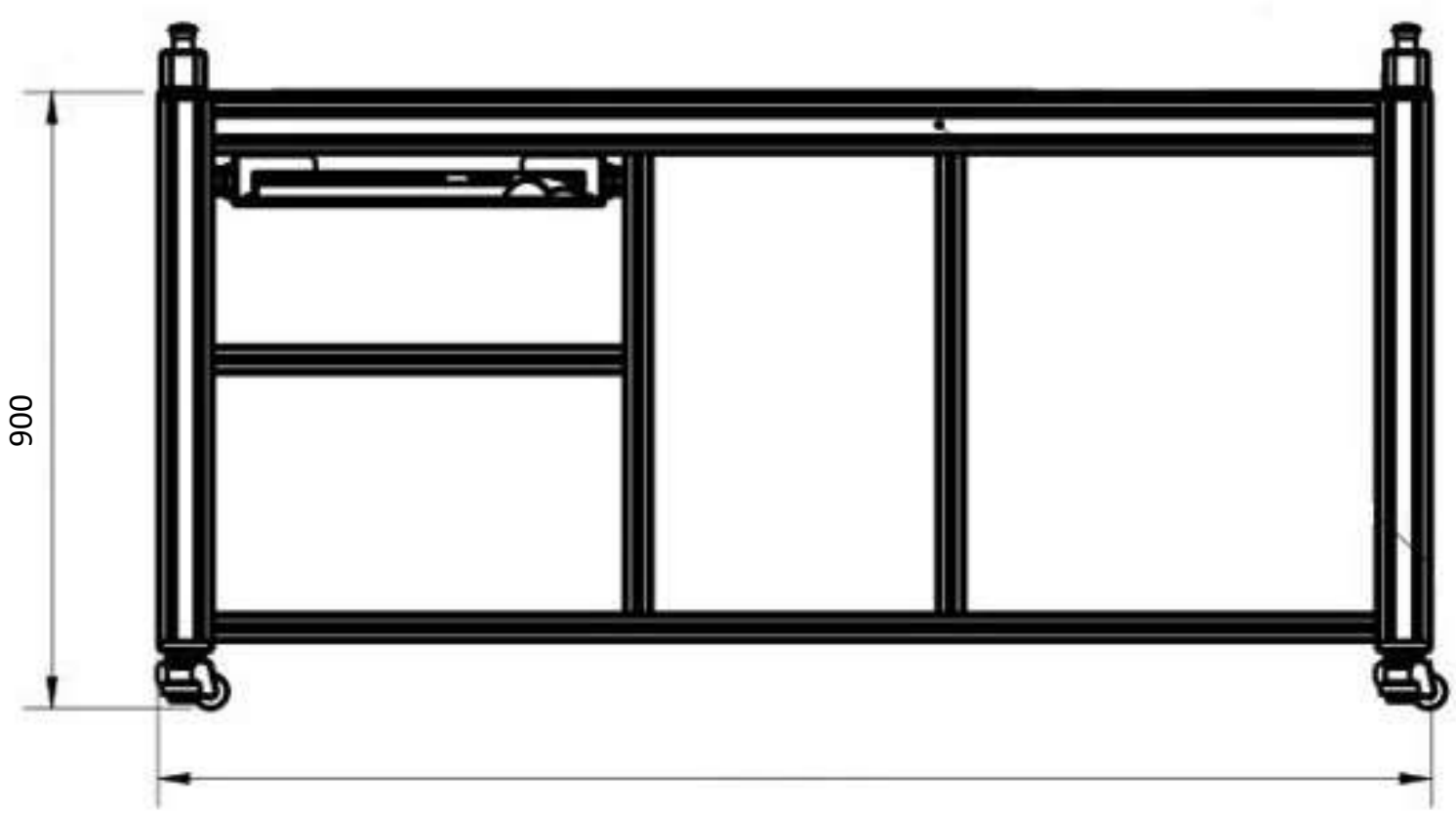
K6³ Dimensions:

END VIEW:



K6³ Dimensions:

OPTIONAL SUPPORT TABLE:



Key Features:

Operator Friendly: Easy to program and operator friendly
Versatile: Able to use multiple plastic ware manufactures plates across applications.
Reliable: Engineered with robustness in mind

System:

Sterilisation: 2 x Wet bath, 1 x Dry station, Internal Germicidal UV lamp (O)
Applications: Colony Picking, Plate Replication, Plate Re Arraying, Arraying
Data Control: On board barcode reader, data input / output files in CSV / XML
Software: Remote driver compatible via input files in CSV XML formats
Easy change applications, user interactive applications.
Source Plates: Bio Assay tray, Petri Dish, Omni tray, Multi Well Growth plate
Destination Plates: SBS footprint shallow / Deep Well 96 and 384 formats.

(S) Standard (O) Optional (N/A) Not Applicable	K6³	Tray Hive	Plate Hive
Colony Picking	(S)	(N/A)	(N/A)
Replication	(O)	(N/A)	(N/A)
Re Arraying	(O)	(N/A)	(N/A)
Arraying	(O)	(N/A)	(N/A)
Fluorescent image analysis	(O)	(N/A)	(N/A)
Auto Source Tray Handling	(N/A)	(O)	(N/A)
Auto Destination plate handling	(N/A)	(N/A)	(O)
Source capacity (Using Stackers*)	1	6*	(N/A)
Destination Capacity (Using Stackers*)	1	(N/A)	15 to 55*
Throughput speed picks per hour	600	600	800
UV Sterilisation	(O)	(N/A)	(N/A)

Colony Picker Source Labware:

Common use Labware	K6³ (Deck only)	Tray Hive
22 x 22cm Bioassay Tray	1	6
15 x 15cm mini Bioassay tray	1	6
15cm Petri dish	1	6
10cm Petri dish	4	24
8cm Petri dish	4	24
SBS Omni tray	4	24
SBS 6 well Growth Plate	4	24
SBS 12 well Growth Plate	4	24
SBS 24 well Growth Plate	4	24
SBS 48 well Growth Plate	4	24

Colony Picker Destination Labware:

Common use Labware	K6³ (Deck only)	Double Plate Hive 1 lane	Double Plate Hive 2 lanes
SBS 96 well Plate	2	45	90
SBS 96 Deepwell Plate	2	15	30
SBS 384 well Plate	2	45	90
SBS 384 well Plate Low profile	2	70	140
SBS 384 Midwell Plate	2	24	48
SBS 24 Deepwell Plate	2	15	30
SBS Omni tray	2	45	90

These details are based on current common use items, and not limited to.
All systems are supplied with our plastic ware creation software that allows you to define specific consumables providing they are supported correctly physically within the light table boundaries and all positions are taught correctly through the relevant maintenance software.