

## PRE-INSTALLATION GUIDE

# QPix Flex Microbial Colony Pickers

Welcome to the family of Molecular Devices QPix® Flex Microbial Colony Pickers users. This document provides you with the necessary information to prepare your facility for the installation of your new QPix Flex system.

This document covers the following topics:

- Environment Requirements
- Weight
- Space Requirements
- Table Requirements
- Power requirements
- Hypoxic Chamber Requirements
- Facility Receiving Requirements
- Safety Features
- Transport and Storage
- Service and Support

## Environment Requirements

### Indoor use only

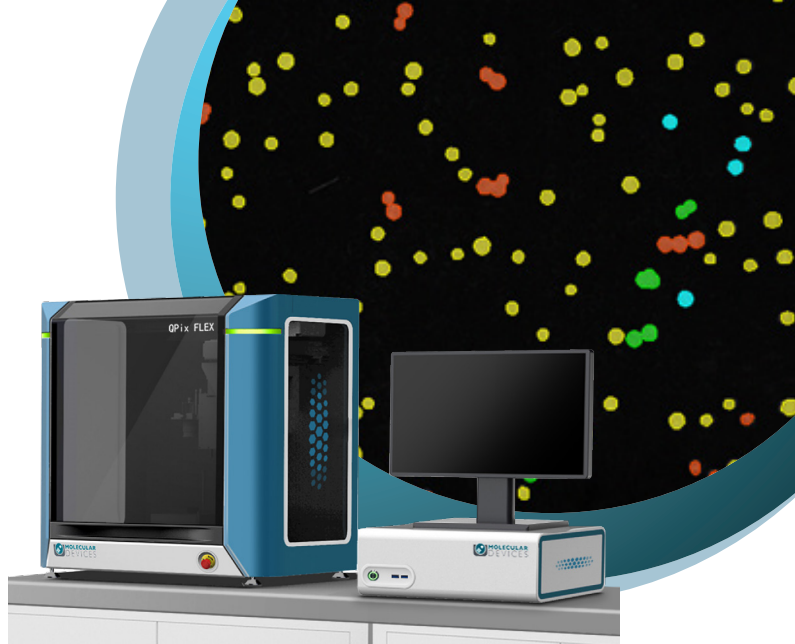
|                       |   |
|-----------------------|---|
| Temperature           | 15°C to 40°C (59°F to 104°F)                    |
| Humidity              | 30 to 75% non-condensing at 37°C (98.6°F)       |
| Altitude              | Up to 2000M (6561 ft.)                          |
| Mains supply          | +/- 10% Rated Voltage                           |
| Transient overvoltage | Installation category (Overvoltage category) II |
| Rated Pollution       | Pollution degree 2                              |

## Weight

- Main Body 80 kg (176.4 lb.)
- Control Box 12 kg (25.5 lb.)
- Optional HEPA 29.5 kg (65 lb.)

## Power Requirements

100 - 240V, 50/60 Hz, 900W maximum



## Space Requirements

The size and weight for the instrument portion of the QPix Flex system are provided below. There must be access to the front, sides, and back of the instrument to allow service access to the filters and other preventative maintenance replacement parts.

The QPix Flex system is a user-friendly instrument that can be placed on most laboratory tables because of its small footprint, even with the optional HEPA filter. The instrument should be set up on a standard experiment table that is sturdy and has appropriate clamps to prevent the instrument from excessive shaking.

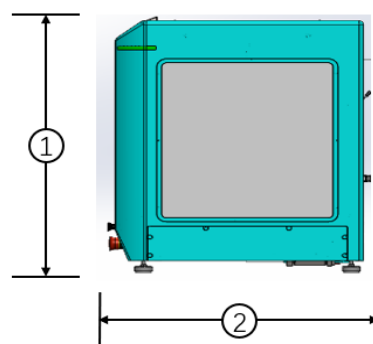
A minimum 2-foot clearance radius must be maintained for both configurations for service access.

### Main Body Dimensions

- 64 cm W x 55 cm D x 70 cm H (25.2 in. x 21.7 in. x 27.6 in.)
- 64 cm W x 55 cm D x 96 cm H (25.2 in. x 21.7 in. x 37.8 in.) with HEPA

### Control Box Dimensions

- 44 cm W x 32.5 cm D x 14.5 cm H (17.3 in. x 12.8 in. x 5.7 in.)



Side view

- (1) Height of instrument: 70 cm (27.6 in.)  
(2) Depth of instrument: 55 cm (21.7 in.)

## Table Requirements

Size: Length > 108 cm (42.5 in.), Width > 55 cm (21.7 in.)

Load-capacity: > 120 kg (265 lb.)

When selecting an experiment table, you should consult with a professional from Molecular Devices Technical Support or suppliers who have experience with laboratory furniture to get recommendations based on your specific needs.

## Hypoxic Chamber Minimum Requirements

Operating room size: 115 cm W x 90 cm D x 85 cm H (45.3 in. x 35.4 in x 33.5 in.)

Sampling room size: 32 cm W x 21 cm D x 32 cm H (12.6 in. x 8.3 in. x 12.6 in.)

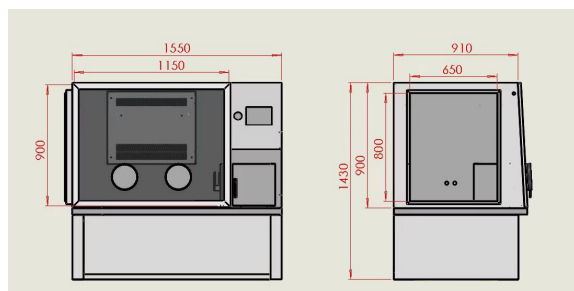
Net opening size: 65 cm\* W x 80 cm H (side entry)

The chamber must have a flat bottom edge similar to a lab bench to ensure the instrument can slide in and out easily.

Table loading capacity: 100 kg (221 lb.)

The following cables need to go through the chamber and be well sealed. The hole in the chamber must allow the cable plug to pass through, but the seal needs to fit the cable diameter.

|               |      |       |
|---------------|------|-------|
| Power Cable   | 30mm | 9mm   |
| Camera USB    | 22mm | 6mm   |
| Mainboard USB | 20mm | 5.5mm |



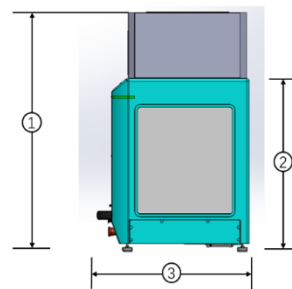
## Facility Receiving Requirements

Only Molecular Devices personnel are authorized to open the crates.

Equipment will arrive in one or two crates depending on options. Shipping crate dimensions and weights are shown below. Crates must be stored inside and protected from environmental extremes until equipment is removed. The instrument crate requires 3 m (10 ft) of clearance on one side to allow removal of the instrument from the crate.

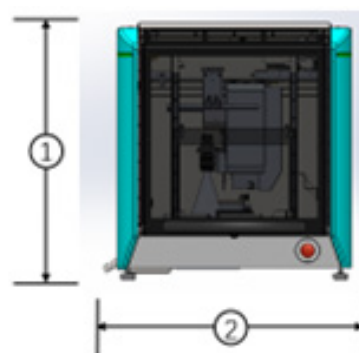
**QPix Flex system – depending on options it can have 2 crates**

|   | L                  | W                 | H                  | Weight              |
|---|--------------------|-------------------|--------------------|---------------------|
| Instrument crate (instrument, control box, accessories, etc.) | 160 cm<br>(62 in.) | 84 cm<br>(33 in.) | 134 cm<br>(53 in.) | 300 Kg<br>(661 lb.) |
| HEPA crate (optional)   | 60 cm<br>(24 in.)  | 48 cm<br>(19 in.) | 27 cm<br>(11 in.)  | 29.5 Kg<br>(65 lb.) |



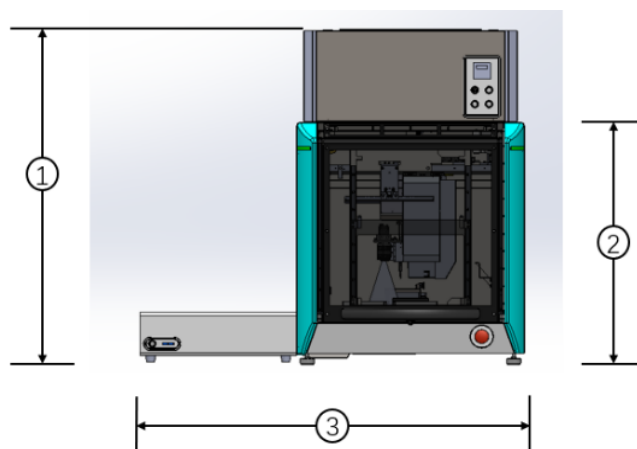
Side view

- (1) Height of instrument with HEPA: 96 cm (37.8 in.)  
 (2) Height of instrument without HEPA: 70 cm (27.6 in.)  
 (3) Depth of instrument: 55 cm (21.7 in.)  
 Optional HEPA dimensions:  
 60 cm W X 47 cm D X 27 cm H  
 (23.6 in. X 18.5 in. X 10.6 in.)



Front view

- (1) Height of instrument: 70 cm (27.6 in.)  
 (2) Width of instrument: 64 cm (25.2 in.)



Front view with HEPA and Control Box

- (1) Height of instrument with HEPA: 96 cm (37.8 in.)  
 (2) Height of instrument without HEPA: 70 cm (27.6 in.)  
 (3) Width of instrument with Control Box: 108 cm (42.5 in.)

## Safety Features

### External or Implanted Medical Device Safety

QPix Flex uses step motors, timing belts, rails, and cables without electromagnetic fields.

### Electrical Safety

The control box must be connected to a properly earthed power outlet to protect users from the risk of electrical shock. The main chassis of the instrument is earthed together with all associated electrical components. Do not remove any of the fixed covers, as there are no user serviceable parts inside. All internal work should be referred to Molecular Devices approved service personnel. In the event of a liquid spillage into the bedplate of the instrument, the power supply must be disconnected at the mains before any attempt is made to clean up the spillage. There should not be any spillage from the Wash Bath in normal use with the Wash Station correctly set up. However, spill trays have been fitted where appropriate.

There is no alternating current within the instrument, but all safety instructions should be read and understood before proceeding with the installation, maintenance, and servicing of all modules. Always turn the power switch off and disconnect the power cord from the control box and main power source before performing a maintenance procedure that requires removal of a panel or cover or disassembly of an interior instrument component.

### Moving Parts Safety

The ADP, motors, drive units, and encoders are delicate, so be very careful with them. To prevent serious damage to the instrument or its auxiliary parts, follow the preparation instructions the System User Guide before every process.

Any additional adjustments on movement parts and imaging camera, please find the support from Molecular Devices approved engineer.

**WARNING! Do not obstruct or otherwise prevent access to the Emergency Stop button.**

## Support and Service

**Only a QPix Flex system trained Molecular Devices engineer is authorized to install or uninstall the instrument.**

For support or service, please contact us at:

Web: [support.moleculardevices.com](https://support.moleculardevices.com)

### Contact Us

Phone: +1.800.635.5577  
Web: [www.moleculardevices.com](https://www.moleculardevices.com)  
Email: [info@moldev.com](mailto:info@moldev.com)  
Check our website for a current listing of worldwide distributors.

### Regional Offices

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Europe\* 00800.665.32860

*\*Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, Spain, Sweden and Switzerland*



## Additional Safety Features

**Door:** The instrument is equipped with an automatically locking door that locks whenever a process is run. The door is made from acrylic which prevents UV light from passing through during operation. As a safety measure, if the door is open, an electromagnetic switch prevents the instrument from running. Do not tamper with this switch as it serves two purposes: It prevents the ADP and motors from running to reduce the potential of physical damage, and it disables the UV light to prevent the risk of damage from UV radiation.

**UV light:** The QPix Flex instrument is fitted with a UV LED lamp with timer. This is a 20 W 12 VDC lamp with a sharply defined output at 275 nm making the lamp an efficient source of germicidal radiation.

**Emergency Stop button:** In an emergency, press the Emergency Stop button on the front of the instrument to immediately stop the instrument and cut power from the drives. The button must be pulled out before you press the Start button to restart the instrument.

**Noise level:** Maximum sound pressure at one meter: 70 dBA.

## Transport and Storage

The instrument must be stored and transported in temperatures within the range -20°C to +50°C (-4°F to 122°F).

The instrument should not be moved after installation. If relocation is necessary, contact Molecular Devices Customer Relations.

The instrument should be moved into position using appropriate handling equipment such as forklift trucks or dolly trucks. The instrument should be properly balanced on the forks prior to lifting.

**Important note: Do not use any part of the exterior bodywork to lift the instrument as this may cause irreparable damage.**

**Important note: Retain the instrument lifter for servicing; if it is not retained, the customer will need to purchase a replacement at their own cost.**

## Acceptance

### Please review and sign:

Sign below to indicate that the installation site is in compliance with all requirements described in this document. If your site is not in compliance, Molecular Devices may not be able to install the QPix Flex system. In addition, you may be billed for an additional visit by a Molecular Devices Field Service Engineer.

### Sign and Date Here

|                  |                  |               |                  |
|------------------|------------------|---------------|------------------|
| China (Beijing)  | +86.10.6410.8669 | Brazil        | +55.11.3616.6607 |
| China (Shanghai) | +86.21.3372.1088 | Japan (Osaka) | +81.6.7174.8331  |
| Hong Kong        | +852.3971.3530   | Japan (Tokyo) | +81.3.6362.9109  |