

London, July 2020

## **bCUBE**

Portable, Fast, Easy

## **Hyris Ltd**

#### Hyris Headquarters

Lower Ground Floor, One George Yard EC3V 9DF – London – UK Phone: +44.2039361227

Mail: office.uk@hyris.net

#### Hyris Research Center

Corso Garibaldi, 60 20121 – Milano – Italy Phone: +39.02.82951302

Mail:

Hyris US Phone: +1 669 240 8318 Email: office.us@hyris.net

office@hyris.net

**Hyris Asia Pac** 38 Ang Mo Kio Industrial Park 2 #02-07A 569511 – Singapore – Singapore Phone: +65.8160.7207 Mail: office.uk@hyris.net

www.hyris.net





The bCUBE is intended to be used with the bKITs by professionals in commercial settings. Follow the use and storage instructions very carefully to ensure that the results obtained are as accurate as possible.

The User must follow all applicable local, state/provincial, and/or national regulations for each specific application and wear appropriate protective equipment while performing the tests.

#### IMPORTANT USE INFORMATION

The bCUBE is a component of the Hyris Virus Finder System. Its use in conjunction with the Environmental Testing bkITs is intended to detect the presence and/or absence of pathogens (like Sars-Cov-2 in case of Sars-Cov-2

Environmental bKIT) on non-porous hard surfaces and fomites. Contamination of surfaces can occur at any point after testing or surface disinfection, so it is critical to use the Hyris Virus Finder System after each disinfection procedure.

The Environmental Testing bKTS are NOT intended or use as a human diagnostic. Results obtained using the bCUBE with the Environmental testing bKTS cannot be extrapolated from one surface, substance, or location to another surface, substance, or location. The choice of specific surfaces, substances, or locations to be tested, as well as the frequency of testing, is to be determined by the user's protocol. The Hyris Virus Filmer System does not make any representations or recommendations concerning which surfaces, substances, or locations should be tested, or how often testing should be performed. The User must follow all applicable local, state/provincial, and/or national regulations regarding pathogens and wear appropriate protective equipment while performing the test. If a surface is found to be contaminated, you must follow your company's disinfection protocol regarding additional disinfection.

#### WARNING AND PRECAUTIONS

Please check Kits integrity before use. Use of deteriorated Kits may cause lack of results and/or equivocal results. Do not mix the components of kits with different batch number. Do not interchange reagents with other kits, or components from different lots. Do not use reagents after their expiration date. This kit is designed to be used by personnel trained to follow correct molecular biology precautions.

#### WARRANTY AND RESPONSIBILITIES

Hyris Ltd guarantees the buyer exclusively concerning the quality of reagents and of the components used to produce the Kits. Any product not fulfilling the specifications included in the product sheet will be replaced. This warranty limits our responsibility to the replacement of the product. No other warranties, of any kind, express or implied, including, without limitation, implicit warranties of commercialisation ability or adequacy for a given purpose, are provided by Hyris Ltd. Hyris Ltd is not responsible and cannot anyway be considered responsible on account anyway be considered responsible on account anyway be considered responsible or jointly responsible from possible direct and indirect damages resulting from the utilization of the Kits by the user. The user consciously and under his/her own responsibilities decides for the utilization purposes of the Kits and uses it the way he/she considers most suitable in order to reach his/her goals and/or objectives. Hyris Ltd will not be held responsible for any direct, indirect, consequential or incidental damage resulting of the use, misuses, results of the use or inability to use any product. Some of the applications which may be performed with this product may be covered by applicable patents in certain countries. The purchase of this product does not include or provide a license to perform patented applications. Users may be covered to obtain a license depending on the country and/or application. Hyris Ltd does not encourage the unlicensed use of patented applications.

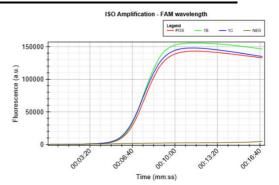
The Kits may require the use of Toq Polymerase enzyme, DNA binding components and fluorochromes/quencher, often registered as trademark by companies. TaqMane\* is a trademark of Roche Molecular Systems, Inc. FAM\*\*, HEX\*\* and ROX\*\*\* are a trademark of Thermo Fisher Scientific or its subsidiaries. SYBR is a registered trademark of Molecular Probes, Inc. (Thermo Fisher Scientific) MGB probes are a trademark of Elitech group. The Kits have been internally tested by our quality control. Any responsibility is waived if the warranty of quality control does not refer to the specific Kits. The user is personally responsible for data that he/she will obtain and/or he/she will supply to third parties using these kits. Once the seaded package is opened the user accepts all the conditions without fail; if the package is still sealed the kit can be returned and the user can be refunded. Kits components are intended, developed, designed, and sold for Research Purpose Only. Product claims are subject to change. Therefore, please refer to our website (www.hyris.net) for the most up-to-date information on Hyris Ltd products.

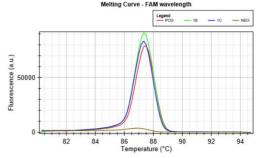
#### **bCUBE**

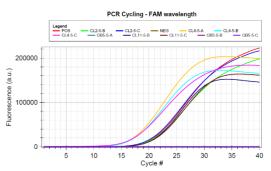
- Portable, fast DNA/RNA amplification and detection
- Robust, Compact, Lightweight for "in the field" operation
- High precision thermal control
- Performing Isothermal Amplification, Real Time PCR and Melting Curves
- Simultaneous multi wavelength detection
- Enhanced connectivity: WiFi, Ethernet
- bDATA® service features cloud storage as well as remote control and monitoring

#### Real Time DNA/RNA amplification and detection

- Detection in less than 15 minutes for Isothermal amplification
- Automatic results interpretation
- Auto-adaptive thermal control that sweeps from very fast (thermal cycling) to very slow ramps (melting curves)
- High speed detection enables high resolution melting curves (sampling < 0.05°C)</li>
- Wireless and wired connectivity for maximum flexibility







### Get Connected with bDATA®

- Share your analyses worldwide with bDATA® cloud service
- Organize your bCUBEs in Swarms, and deploy them wherever you need
- Analyse your data, using filters and statistical tools
- Monitor and control your bCUBEs remotely
- Check the status and the position of your machines on a map





The bCUBE is intended to be used with the bKITs by professionals in commercial settings. Follow the use and storage instructions very carefully to ensure that the results obtained are as accurate as possible.

The User must follow all applicable local, state/provincial, and/or national regulations for each specific application and wear appropriate protective equipment while performing the tests.

#### IMPORTANT USE INFORMATION

The bCUBE is a component of the Hyris Virus Finder System. Its use in conjunction with the Environmental Testing bkITs is intended to detect the presence and/or absence of pathogens (like Sars-Cov-2 in case of Sars-Cov-2

Environmental DKIT) on non-porous hard surfaces and fomites. Contamination of surfaces can occur at any point after testing or surface disinfection, so it is critical to use the Hyris Virus Finder System after each disinfection procedure.

The Environmental Testing bKITs are NOT intended or use as a human diagnostic. Results obtained using the bCUBE with the Environmental testing bKITs cannot be extrapolated from one surface, substance, or location to another surface, substance, or location to nother surface, substance, or location. The choice of specific surfaces, substances, or locations to be tested, as well as the frequency of testing, is to be determined by the user's protocol. The Hyris Virus Finder System does not make any representations or recommendations concerning which surfaces, substances, or locations should be tested, or how often testing should be performed. The User must follow all applicable local, state/provincial, and/or national regulations regarding pathogens and wear appropriate protective equipment while performing the test. If a surface is found to be contaminated, you must follow your company's disinfection protocol regarding additional disinfection.

#### WARNING AND PRECAUTIONS

Please check Kits integrity before use. Use of deteriorated Kits may cause lack of results and/or equivocal results. Do not mix the components of kits with different batch number. Do not interchange reagents with other kits, or components from different lots. Do not use reagents after their expiration date. This kit is designed to be used by personnel trained to follow correct molecular biology precautions.

#### WARRANTY AND RESPONSIBILITIES

Hyris Ltd guarantees the buyer exclusively concerning the quality of reagents and of the components used to produce the Kits. Any product not fulfilling the specifications included in the product sheet will be replaced. This warranty limits our responsibility to the replacement of the product. No other warranties, of any kind, express or implied, including, without limitation, implicit warranties of commercialisation ability or adequacy for a given purpose, are provided by Hyris Ltd. Hyris Ltd is not responsible and cannot anyway be considered and indirect damages resulting from the utilization of the Kits by the user. The user consciously and under his/her own responsibilities decides for the utilization purposes of the Kits and uses it the way he/she considers most suitable in order to reach his/her goals and/or objectives. Hyris Ltd will not be held responsible for any direct, indirect, consequential or incidental damage resulting of the use, misuses, results of the use or inability to use any product. Some of the applications which may be performed with this product may be covered by applicable patents in certain countries. The purchase of this product does not include or provide a license to perform patented applications. Users may be converging the unlicensed use of patented applications.

The Kits may require the use of Taq Polymerase enzyme, DNA binding components and fluorochromes/quencher, often registered as trademark by companies. TaqMann\* is a trademark of Roche Molecular Systems, Inc. FAM\*, HEX\* and ROX\*\* are a trademark of Thermo Fisher Scientific or its subsidiaries. SYBR is a registered trademark of Molecular Probes, Inc. (Thermo Fisher Scientific) MGB probes are a trademark of Elitech group. The Kits have been internally tested by our quality control. Any responsibility is waived if the warranty of quality control does not refer to the specific Kits. The user is personally responsible for data that he/she will obtain and/or he/she will supply to third parties using these kits. Once the sealed package is opened the user accepts all the conditions without fail; if the package is still sealed the kit can be returned and the user can be refunded. Kits components are intended, developed, designed, asold for Research Purpose Only. Product claims are subject to change. Therefore, please refer to our website (www.hyris.net) for the most up-to-date information on Hyris Ltd products.

#### Get Smarter with bAPP

- · Smart analysis portability with Hyris bAPP
- Wireless bCUBE control enables "in the field" bio-molecular detection
- Link each sample with photographs and GPS tags
- Start your analysis with a few touches, no need to be an expert
- Watch the detection progress in real-time
- Compatible with Smartphones, Tablets, PCs/Notebooks
- Runs on all Operating Systems: Windows, Linux, MacOS/iOS
- Live sync with bDATA® service



#### **bPANEL**

- Get full control of bCUBE with bPANEL Windows PC interface
- Isothermal (LAMP) or Thermal Cycling (Real Time PCR) protocols supported
- Offline use supported
- Get raw data from the instrument and export it for processing with your favourite software
- Create and share custom PDF reports of your experiments





The bCUBE is intended to be used with the bKITs by professionals in commercial settings. Follow the use and storage instructions very carefully to ensure that the results obtained are as accurate as possible.

The User must follow all applicable local, state/provincial, and/or national regulations for each specific application and wear appropriate protective equipment while performing the tests.

#### IMPORTANT USE INFORMATION

The bCUBE is a component of the Hyris Virus Finder System. Its use in conjunction with the Environmental Testing bKITs is intended to detect the presence and/or absence of pathogens (like Sars-Cov-2 in case of Sars-Cov-2

Environmental DKIT) on non-porous hard surfaces and fomites. Contamination of surfaces can occur at any point after testing or surface disinfection, so it is critical to use the Hyris Virus Finder System after each disinfection procedure.

The Environmental Testing bKITs are NOT intended or use as a human diagnostic. Results obtained using the bCUBE with the Environmental testing bKITs cannot be extrapolated from one surface, substance, or location to another surface, substance, or location. The choice of specific surfaces, substances, or locations to be tested, as well as the frequency of testing, is to be determined by the user's protoci. The Hyris Virus Finder System does not make any representations or recommendations concerning which surfaces, substances, or locations should be tested, or how often testing should be performed. The User must follow all applicable local, state/provincial, and/or national regulations regarding pathogens and wear appropriate protective equipment while performing the test. If a surface is found to be contaminated, you must follow your company's disinfection protocol regarding additional disinfection.

#### WARNING AND PRECAUTIONS

Please check kits integrity before use. Use of deteriorated kits may cause lack of results and/or equivocal results. Do not mix the components of kits with different batch number. Do not interchange reagents with other kits, or components from different lots. Do not use reagents after their expiration date. This kit is designed to be used by personnel trained to follow correct molecular biology precautions.

#### WARRANTY AND RESPONSIBILITIES

Hyris Ltd guarantees the buyer exclusively concerning the quality of reagents and of the components used to produce the Kits. Any product not fulfilling the specifications included in the product sheet will be replaced. This warranty limits our responsibility to the replacement of the product. No other warranties, of any kind, express or implied, including, without limitation, implicit warranties of commercialisation ability or adequacy for a given purpose, are provided by Hyris Ltd. Hyris Ltd is not responsible and cannot anyway be considered responsible and cannot anyway be considered responsible on control anyway be considered responsible or jointly responsible for possible direct and indirect damages resulting from the utilization of the Kits by the user. The user consciously and under his/her own responsibilities decides for the utilization uproposes of the Kits and uses it the way he/she considers most suitable in order to reach his/her goals and/or objectives. Hyris Ltd will not be held responsible for any direct, indirect, consequential or incidental damage resulting of the use, misuses, results of the use or inability to use any product. Some of the applications which may be performed with this product may be covered by applicable patents in certain countries. The purchase of this product does not include or provide a license to perform patented applications. Users may be required to obtain a license depending on the country and/or applications.

The Kits may require the use of Taq Polymerase enzyme. DNA binding components and fluorochromes/quencher, often registered as trademark by companies. TaqMane is a trademark of Roche Molecular Systems, Inc. FAM'', HEN'' and ROX'' are a trademark of Thermo Fisher Scientific or its subsidiaries. SYBR is a registered trademark of Molecular Probes, Inc. (Thermo Fisher Scientific). MGB probes are a trademark of Elitech group. The Kits have been internally tested by our quality control. Any responsibility is waived if the warranty of quality control does not refer to the specific Kits. The user is personally responsible for data that he/she will obtain and/or he/she will supply to third parties using these kits. Once the sealed package is opened the user accepts all the conditions without fail; if the package is still sealed the kit can be returned and the user can be refunded. Kits components are intended, developed, designed, also dal for Research Purpose Only. Product claims are subject to change. Therefore, please refer to our website (www.hyris.net) for the most up-to-date information on Hyris Ltd products.

# **bCUBE**Technical Specs

**Dimensions** 100 x 100 x 120 mm

Weight 1.15 kg

User Interface bAPP (Multi Platform) / bPANEL (Windows PC)

Communication Interfaces WiFi, Ethernet

Sample number

16 samples on standard cartridge (36 samples cartridge soon

available

**Reaction volume** 10 to 30 μl (16 wells cartridge) \*

**Light source** High brightness LEDs – 2 wavelengths

Excitation wavelengths 472 and 530 nm

**Optical Detection** High resolution, low noise CMOS Camera (5MP)

**Acquisition time** < 1s – Total time for all samples

**Detected wavelengths** 572 nm and 524 nm

Thermal Block Peltier module for heating and cooling

**Temperature sensor** High precision NTC resistor

Temperature resolution < 0.05 °C

Temperature uniformity  $\pm 0.1 \,^{\circ}\text{C}$ 

**Temperature control range** 20 – 99 °C

**Temperature ramp** Up to 1.5 °C/s

Power supply 12 V – DC

Power consumption Max 60W

Actual sample volume required may depend on the specific analytical kit.