

London, May 2018

# **bCUBE®**

Portable, Fast, Easy

## **Hyris Ltd**

### **HYRIS Headquarters**

Lower Ground Floor, One George Yard,  
EC3V 9DF, London, UK  
Phone: +44.2036082968  
Mail: [office@hyris.net](mailto:office@hyris.net)

### **HYRIS Research Center**

Corso Garibaldi 60,  
Milano 20121, Italy  
Phone: +39.02.82951302  
Mail: [administrator@hyris.net](mailto:administrator@hyris.net)

### **HYRIS Asia Pac**

Block 998 Toa Payoh North #06-06  
Toa Payoh North Industrial Estate  
Singapore 318993, Singapore  
Phone: +65.8160.7207  
Mail: [office@hyris.net](mailto:office@hyris.net)

[www.hyris.net](http://www.hyris.net)



## Hyris Ltd

### HYRIS Headquarters

Lower Ground Floor, One George Yard,  
EC3V 9DF, London, UK  
Phone: +44.2036082968  
Mail: office@hyris.net

### HYRIS Research Center

Corso Garibaldi 60,  
Milano 20121, Italy  
Phone: +39.02.82951302  
Mail: administrator@hyris.net

### HYRIS Asia Pac

Block 998 Toa Payoh North #06-06  
Toa Payoh North Industrial Estate  
Singapore 318993, Singapore  
Phone: +65.8160.7207  
Mail: office@hyris.net

www.hyris.net

### WARNING AND PRECAUTIONS

Do not use for any other than the intended use of the instrument. This instrument is designed to be used by personnel trained to follow the usual molecular biology precautions.

### WARRANTY AND RESPONSIBILITIES

Hyris Ltd guarantees the buyer exclusively concerning the quality of the components used to produce the instrument. Hyris Ltd is not responsible and cannot anyway be considered responsible or jointly responsible for possible direct and indirect damages resulting from the utilization of the instrument by the user. The user consciously and under his/her own responsibilities decides the purposes of usage of the instrument and uses it the way he/she considers most suitable in order to reach his/her goals and/or objectives.

Hyris is not responsible for the data resulting from the use of the instrument, for the utilization that the user independently decides to make of it or for the direct or indirect damages possibly resulting from the disclosure or transmission of the data themselves to third parties under any form or circumstance. This clause is automatically accepted by the user when purchasing the instrument.

The patent for performing PCR and Real-Time PCR is held by Hoffmann-La Roche. Authorization to use PCR and Real-Time PCR can be obtained on licence from Hoffmann-La Roche. Other reagents may need a licence from additional patent holders. The product and information included in the Kits consist of the assembled instrument and user manual. The licence and authorisation for PCR, Real-Time PCR and other reagents use are not included in the Kits. The user is responsible for setting prefixed goals, choosing whether or not to perform the PCR, Real-Time PCR and isothermal reaction and to apply for register his/her own licence.

The instrument is not approved for human diagnostics. Services supply, quality control or any other application that is not exclusively an internal company's research requires a specific licence from relevant patent holders.

The instruments have been internally tested by our quality control. Any responsibility is waived if the warranty of quality control does not refer to the specific instrument being purchased. The user is personally responsible for data that he/she will obtain and/or he/she will supply to third parties using these instruments. Once the sealed package is opened the user accepts all the above conditions without exception

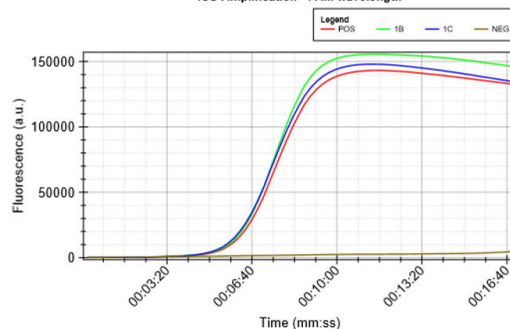
## bCUBE®

- 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, Bluetooth
- bDATA® service features cloud storage as well as remote control and monitoring

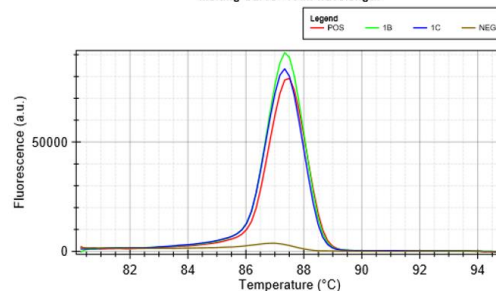
### Real Time DNA/RNA amplification and detection

- 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)
- Wireless and wired connectivity for maximum flexibility

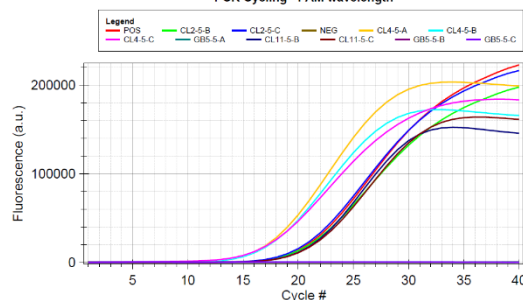
ISO Amplification - FAM wavelength



Melting Curve - FAM wavelength



PCR Cycling - FAM wavelength



## 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



## Hyris Ltd

### HYRIS Headquarters

Lower Ground Floor, One George Yard,  
EC3V 9DF, London, UK  
Phone: +44.2036082968  
Mail: office@hyris.net

### HYRIS Research Center

Corso Garibaldi 60,  
Milano 20121, Italy  
Phone: +39.02.82951302  
Mail: administrator@hyris.net

### HYRIS Asia Pac

Block 998 Toa Payoh North #06-06  
Toa Payoh North Industrial Estate  
Singapore 318993, Singapore  
Phone: +65.8160.7207  
Mail: office@hyris.net

www.hyris.net

### WARNING AND PRECAUTIONS

Do not use for any other than the intended use of the instrument. This instrument is designed to be used by personnel trained to follow the usual molecular biology precautions.

### WARRANTY AND RESPONSIBILITIES

Hyris Ltd guarantees the buyer exclusively concerning the quality of the components used to produce the instrument. Hyris Ltd is not responsible and cannot anyway be considered responsible or jointly responsible for possible direct and indirect damages resulting from the utilization of the instrument by the user. The user consciously and under his/her own responsibilities decides the purposes of usage of the instrument and uses it the way he/she considers most suitable in order to reach his/her goals and/or objectives.

Hyris is not responsible for the data resulting from the use of the instrument, for the utilization that the user independently decides to make of it or for the direct or indirect damages possibly resulting from the disclosure or transmission of the data themselves to third parties under any form or circumstance. This clause is automatically accepted by the user when purchasing the instrument.

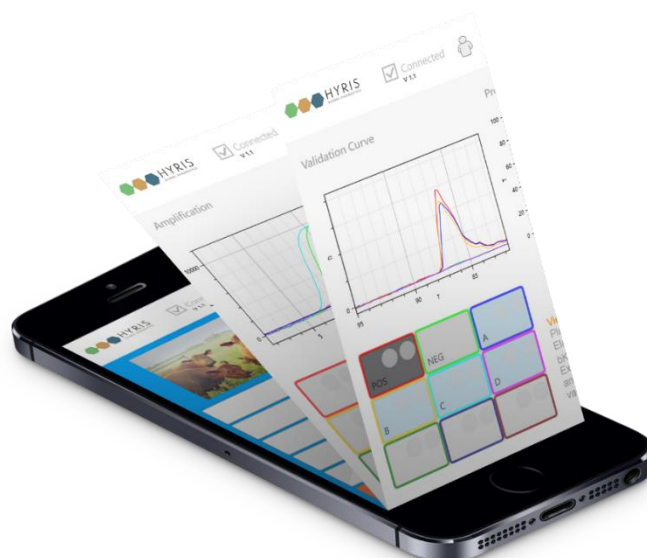
The patent for performing PCR and Real-Time PCR is held by Hoffmann-La Roche. Authorization to use PCR and Real-Time PCR can be obtained on licence from Hoffmann-La Roche. Other reagents may need a licence from additional patent holders. The product and information included in the Kits consist of the assembled instrument and user manual. The licence and authorisation for PCR, Real-Time PCR and other reagents use are not included in the Kits. The user is responsible for setting prefixed goals, choosing whether or not to perform the PCR, Real-Time PCR and isothermal reaction and to apply for register his/her own licence.

The instrument is not approved for human diagnostics. Services supply, quality control or any other application that is not exclusively an internal company's research requires a specific licence from relevant patent holders.

The instruments have been internally tested by our quality control. Any responsibility is waived if the warranty of quality control does not refer to the specific instrument being purchased. The user is personally responsible for data that he/she will obtain and/or he/she will supply to third parties using these instruments. Once the sealed package is opened the user accepts all the above conditions without exception

## 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



## Hyris Ltd

### HYRIS Headquarters

Lower Ground Floor, One George Yard,  
 EC3V 9DF, London, UK  
 Phone: +44.2036082968  
 Mail: office@hyris.net

### HYRIS Research Center

Corso Garibaldi 60,  
 Milano 20121, Italy  
 Phone: +39.02.82951302  
 Mail: administrator@hyris.net

### HYRIS Asia Pac

Block 998 Toa Payoh North #06-06  
 Toa Payoh North Industrial Estate  
 Singapore 318993, Singapore  
 Phone: +65.8160.7207  
 Mail: office@hyris.net

www.hyris.net

### WARNING AND PRECAUTIONS

Do not use for any other than the intended use of the instrument. This instrument is designed to be used by personnel trained to follow the usual molecular biology precautions.

### WARRANTY AND RESPONSIBILITIES

Hyris Ltd guarantees the buyer exclusively concerning the quality of the components used to produce the instrument. Hyris Ltd is not responsible and cannot anyway be considered responsible or jointly responsible for possible direct and indirect damages resulting from the utilization of the instrument by the user. The user consciously and under his/her own responsibilities decides the purposes of usage of the instrument and uses it the way he/she considers most suitable in order to reach his/her goals and/or objectives.

Hyris is not responsible for the data resulting from the use of the instrument, for the utilization that the user independently decides to make of it or for the direct or indirect damages possibly resulting from the disclosure or transmission of the data themselves to third parties under any form or circumstance. This clause is automatically accepted by the user when purchasing the instrument.

The patent for performing PCR and Real-Time PCR is held by Hoffmann-La Roche. Authorization to use PCR and Real-Time PCR can be obtained on licence from Hoffmann-La Roche. Other reagents may need a licence from additional patent holders. The product and information included in the Kits consist of the assembled instrument and user manual. The licence and authorisation for PCR, Real-Time PCR and other reagents use are not included in the Kits. The user is responsible for setting prefixed goals, choosing whether or not to perform the PCR, Real-Time PCR and isothermal reaction and to apply for register his/her own licence.

The instrument is not approved for human diagnostics. Services supply, quality control or any other application that is not exclusively an internal company's research requires a specific licence from relevant patent holders.

The instruments have been internally tested by our quality control. Any responsibility is waived if the warranty of quality control does not refer to the specific instrument being purchased. The user is personally responsible for data that he/she will obtain and/or he/she will supply to third parties using these instruments. Once the sealed package is opened the user accepts all the above conditions without exception

## 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, Bluetooth
Sample number	16 samples on standard cartridge, up to 49 on custom cartridges
Sample 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	± 0.1 °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.

\*\* Custom optical design possible upon request, up to four wavelengths capability.