# **LR2RC OVEN SYSTEMS**







## LR2RC Drying and Curing

The LR2RC platform accommodates various oven systems designed for the efficient drying and curing of processed thin films. The oven systems are known for their compactness and user-friendly features, allowing for seamless addition, removal, or replacement in under a minute. Simply affix the preferred drying or curing system relevant to your experiment or pilot run. Our diverse range of oven systems includes

options for hot-air, inert gas, UV-curing, and infrared (IR) curing. Additionally, we offer versatile combo ovens, which combine features such as Hot-air - nert gas // IR or Hot-air - inert gas // IR // UV. To ensure convenience, all our oven systems are equipped with an 80 mm exhaust port for effortless connection to point ventilation and boast complete thermal isolation for optimal performance.

### Hot-Air - Inert Gas Oven

This is the most popular LR2RC oven unit as it allows for efficient drying of most of the processed thin films where the drying process involves evaporation of a solvent carrier. This can be done using either compressed air or inert gas. The desired drying temperature is quickly reached and can easily be adjusted using the integrated PID controller.



Drying	Hot Air or Inert Gas
Temperature Range	Up to 140 °C
Power	1000 W
Temperature Control	PID Controller
Gas Pressure	< 6 bar
Gas Flow	120 l/min
Dimensions (WxDxH)	24 cm x 35 cm x 33 cm
Drying Length	19 cm
Weight	8 kg

### **Infrared Oven**

This powerful heat source works by directly transferring heat to the material rather than heating the air around it. The IR oven unit works with two 500-Watt IR light sources that can easily be exchanged for a more enhanced drying. We offer 3 different IR light sources for this system: Clear, Ruby and Gold. The IR intensity is adjusted using a potentiometer and the air temperature is displayed on the front of the oven unit. The 1kW IR oven also comes with an option for inert gas that enables IR drying under inert conditions.



Drying	Infrared Light
Power	1000 W
Power Control	Potentiometer
Gas Pressure (Only for Inert Gas)	< 6 bar
Dimensions (WxDxH)	24 cm x 35 cm x 33 cm
Drying Length	19 cm
Weight	8 kg

### **UV-LED Oven**

The UV-LED oven unit is equipped with LED light sources which allow for quick curing (photopolymerization) in many different applications such as adhesives and coatings. The standard configuration employs 365 nm wavelength, but it is possible to have customized wavelengths installed. The intensity of the LED light is adjusted using the potentiometer placed on the front of the oven unit. The UV-LED oven also comes with an option for inert gas that enables UV curing under inert conditions.



Drying/Curing	UV-Light LED
Power	Depending on Wavelength
Power Control	Potentiometer
Gas Pressure (Only for Inert Gas)	< 6 bar
Dimensions (WxDxH)	24 cm x 35 cm x 33 cm
Drying Length	19 cm
Weight	8 kg

### **UV-Oven**

The UV-curing oven is based on an arc light source and emits UV-A, UV-B and UV-C. With its intense energy output and unique spectral properties, it is very useful for printings, coatings, and adhesives due to its ability to provide rapid, energy-efficient, and precise curing processes.



Drying/Curing	UV Arc Light
Power	150 W
Power Control	On/Off
Gas Pressure (Only for Inert Gas)	< 6 bar
Dimensions (WxDxH)	24 cm x 35 cm x 33 cm
Drying Length	19 cm
Weight	8 kg

### Combo Oven: Hot-Air - Inert Gas / IRs

This oven combines the best of heating technologies. With the ability to utilize hot-air - inert gas, and infrared (IR) heating, this oven is perfect when extra high drying versatility is needed, especially for our compact units (LR2RC500) where additional ovens cannot be added.



Drying/Curing	Hot Air or Inert Gas and IR
Power	1.2 kW
Power Control	PID Controller and Potentiometer
Gas Pressure	< 6 bar
Gas Flow	120 l/min
Dimensions (WxDxH)	24 cm x 35 cm x 33 cm
Drying Length	Hot Air or Inert Gas: 5cm IR: 14 cm
Weight	8 kg

### Combo Oven: Hot-Air - Inert Gas / IRs / UV

The super powerful all-in-one LR2RC oven. This cutting-edge appliance combines the power of hot-air, inert gas, infrared (IR), and ultraviolet (UV) technologies in a compact oven system.



Drying/Curing	Hot Air or Inert Gas, IR and UV
Power	1.35 kW
Power Control	Hot Air or Inert Gas: PID Controller IR: Potentiometer UV: On/Off
Gas Pressure	< 6 bar
Dimensions (WxDxH)	24 cm x 35 cm x 33 cm
Drying Length	Hot Air or Inert Gas: 5cm IR and UV: 14 cm
Nominal Power Consumption	2 kW
Weight	8 kg

### **Double Inert Gas Oven**

Double the length and with more than double the drying power. One of the key features of the double inert gas oven is its ability to provide dual-zone temperature control. The oven's dual-zone capabilities enable precise control over temperature gradients which is crucial for processes that demand critical temperature ranges for optimal results. Operators can easily fine-tune the temperature for each zone, ensuring reliable and consistent outcomes.



Drying	Hot Air or Inert Gas
Temperature Range	Up to 180 °C
Temperature Control	PID Controller (2 zones)
Gas Pressure	< 6 bar
Gas Flow	200 l/min
Dimensions (WxDxH)	49 cm x 35 cm x 33 cm
Drying Length	43.5 cm
Nominal Power Consumption	2000 Watt
Weight	15 kg





### **Our History**

Established in 2014 by CEO Frederik C. Krebs, infinityPV is a Danish company that has been steadfastly committed to printed electronics since its inception. Over time, our focus has naturally expanded to cover all aspects of advanced modern manufacture based on roll-to-roll processing that grants access to a large scaling potential for any given fixed size production platform. Our success is underpinned by a dedicated effort to maintain a low environmental footprint in both product development and manufacturing processes.

### **Our Knowledge**

infinityPV is a high-tech company that centers on green transitioning and our in-depth knowledge base is centered on energy, chemistry, physics, mechanics, electronics, and software. We are extremely apt when it comes to inventiveness and development, which is what unifies the diverse workforce. We have applied our knowledge to make it a business to serve a market where there is typically only one customer – you. There is only one customer because the intricacy of your needs comes from your advanced research and our knowledge can help you run the extra mile or reach that extra goal.

### A Company You Can Trust

Your needs are unique, and we almost certainly have material in stock that will grant you the fastest access to exactly what you need. We invite you to come to our production site and see for yourself before you engage in business with us. We guarantee customer satisfaction, and we are proud to say that we offer everlasting support to our existing clients and the products we make for them. We always have spare parts in stock or can make them quickly. We leave nobody behind.



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