

# Smart firing procedures

Programat®

P710 G2

P510 G2

P310 G2

The next generation of  
Programat ceramic furnaces



# Your smart specialist for high-quality firing results

Modern. Intuitive. Smart.  
With the objective to meet the requirements of your dental laboratory.

Proven technologies, such as the infrared technology, combined with new features - that is what makes the new Programat ceramic furnace your reliable specialist.

The new Programat generation:  
P710 G2, P510 G2, P310 G2



Modern design

- ✓ Dynamic colour concept
- ✓ Ergonomic shapes and forms
- ✓ Optimized cooling tray for more space and better cooling

High process reliability

- ✓ Fast and high-quality firing results due to infrared technology
- ✓ IoT function for free monthly equipment usage reports
- ✓ Preset programs and material groups

Intuitive operation

- ✓ New membrane-sealed keypad with proven colour touchscreen display
- ✓ New user interface featuring new symbols and icons
- ✓ Efficient and reliable performance due to software optimizations

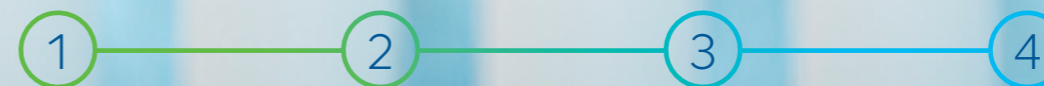




# Delivers more than meets the eye.

Stay informed about your furnace. Receive a monthly usage report for your device<sup>[1]</sup> free of charge via e-mail.

This is how it works:



1 Make sure the device is connected to your Internet.

2 Register your Programat ceramic furnace on <https://mydevice.ivoclarvivadent.com/>

3 Subscribe to the report<sup>[1]</sup>

4 Receive your monthly report<sup>[1]</sup> via e-mail



## Your advantages of having this service:

- ✓ Documentation on the device utilization rate and performance data, combined with customer-specific recommendations
- ✓ Easy maintenance and planning of repair work to prevent downtimes
- ✓ Continuous quality improvements of your smart device

[1] Service is not available in all countries. For more information please go to the Terms of Use at [www.ivoclarvivadent.com/digitalservices](http://www.ivoclarvivadent.com/digitalservices)



# High process reliability due to infrared technology (IRT)<sup>[2]</sup>

The integrated thermographic camera is sensitive to infrared radiation and measures the temperature directly at the surface of the objects being fired. The furnace head and the heater are controlled with the infrared camera to ensure that the predefined pre-drying temperature is consistently maintained on the objects in the furnace.

## Cooling process controlled by IRT<sup>[3]</sup>

The infrared camera measures the temperature at the surface of the fired objects again during the opening process of the furnace. A slower and controlled cooling process prevents cracks and fractures. A notification is displayed as soon as the fired objects have reached the appropriate temperature to be removed.

up to **20% faster**  
than conventional furnaces

## Additional benefits at a glance:

- ✓ Reduced risks of cracks in the ceramic
- ✓ Consistent and reproducible high-quality firing results
- ✓ Automatic control of the pre-drying and closing processes - no matter how big or small or how many restorations are placed in the firing chamber

# Further highlights

## QTK2 muffle technology with SiC bottom reflector

The new QTK2 muffle together with the SiC bottom reflector ensures optimum temperature distribution and leads to optimum firing results.

## Digital shade assistant (DSA)

The software compares the shade of the tooth to be analyzed with three pre-selected shade guide teeth on the screen. The shade guide tooth that comes closest to the tooth that is being analyzed is shown on the screen.

## Power Fail Save System

This system bridges short power interruptions of up to 10 seconds, without the program being aborted.

## Automatic double-range temperature calibration (ATK2)

ATK2 calibrates the temperature in the furnace fully automatically and accurately in two different temperature ranges. This ensures high firing precision.

## LAN and USB ports

The furnace can be connected to other devices, such as printers, USB flash drives and external hard drives. Software updates can be downloaded from a USB flash drive at any time.

## Standby key to reduce power consumption

Efficient use of energy and responsible use of valuable resources: Ivoclar Vivadent is committed to this goal. Therefore, our new Programat is equipped with the new Power Saving Technology. In the stand-by mode, the energy consumption of the furnace decreases by almost 40 percent. As a result, you save on electricity costs and help protect our environment. Look out for the "Power Saving Technology" label on the back of your device.

P310 G2



P510 G2



P710 G2



Technical data			
Power supply	110 – 120 V, 50 – 60 Hz 200 – 240 V, 50 – 60 Hz Admissible voltage fluctuations +/- 10 %		
Max. power consumption	12 A at 110 – 120 V 8.5 A at 200 – 240 V		
Vacuum pump data	Max. power consumption: 250 W Final vacuum: < 50 mbar Only tested pumps should be used		
Dimension of closed furnace	Depth: 495 mm Width: 320 mm / 390 mm (with cooling tray) Height: 320 mm	Depth: 495 mm Width: 320 mm / 395 mm (with cooling tray) Height: 320 mm	
Dimensions of firing chamber	Diameter: 90 mm Height: 80 mm		
Max. firing temperature	1200 °C		
Weight	15.6 kg	18.7 kg	18.7 kg
Safety information			
Radio protection / Electromagnetic compatibility	EMC tested		
Delivery form			
	Power cord Vacuum hose Programat firing tray kit 2 Temperature Checking Set 2 USB download cable Programat USB flash drive	Power cord Vacuum hose Programat firing tray kit 2 Automatic Temperature Checking Set ATK2 (test set) USB download cable Programat USB flash drive Programat WLAN Kit	Power cord Vacuum hose Programat firing tray kit 2 Automatic Temperature Checking Set ATK2 (test set) USB download cable Programat USB flash drive Programat WLAN Kit A-D shade guide DSA holder kit
Recommended accessories			
(Not part of the delivery form)	Temperature Checking Set 2 Vacuum pump VP3 easy Firing tongs	Programat Accessory Set Automatic Temperature Checking Set 2 (ATK2) Vacuum pump VP3 easy or VP5 Firing tongs	



Saving electricity  
is easy

If the furnace is not being used, simply press the "Power Saving" key to activate the power-saving mode.





# The right material for your furnace

## IPS e.max Ceram and IPS Style

The Programat ceramic furnaces are especially designed to fire different layering ceramic materials such as IPS e.max Ceram or IPS Style.

IPS e.max Ceram is a fluorapatite glass-ceramic material suitable for characterizing and veneering lithium disilicate glass ceramic (LS<sub>2</sub>) and zirconium oxide materials (ZrO<sub>2</sub>), producing highly esthetic outcomes. Exceptional stability of shade and opacity allow for vibrant visual effects and impressive esthetics.

IPS Style allows you to veneer all popular alloys in the indicated CTE range. The material contains oxyapatite crystals and impresses with its convenient modelling properties and excellent stability during application.

Various Programat assistance systems ensure optimum firing results of the layering ceramics. An efficient workflow enables creative freedom during layering and highly customized solutions.

- ✓ Preset firing programs for convenient working procedures
- ✓ Coordinated firing parameters for optimum homogeneity and surface quality
- ✓ Excellent low-shrinkage firing properties
- ✓ Exceptional stability of shade and opacity even after multiple firing cycles.



## Product comparison



	P310 G2	P510 G2	P710 G2
<b>Warranty</b>			
Warranty period <sup>[4]</sup>	2 years	3 years	3 years
<b>Hardware equipment</b>			
Colour touchscreen display with membrane-sealed keypad	✓	✓	✓
QTK2 muffle technology with SiC bottom reflector	✓	✓	✓
OSD with progress indicator	✓	✓	✓
Programat infrared technology (IRT)		✓	✓
<b>Software equipment</b>			
Easy operation due to modern control concept	✓	✓	✓
Individual programs	300/20	500/20	700/20
Preset Ivoclar Vivadent programs	✓	✓	✓
Power Saving Technology	✓	✓	✓
Integrated maintenance and diagnostic programs (e.g. heater, vacuum, etc.)	✓	✓	✓
System to bridge short power interruptions	✓	✓	✓
Software update via USB flash drive and cable	✓	✓	✓
IoT connectivity	✓	✓	✓
Report	✓	✓	✓
Picture Manager via notebook/PC/Programat app		✓	✓
Integrated multimedia functions		✓	✓
Integrated program copy assistant		✓	✓
Digital shade assistant (DSA)		✓	✓
IRT-controlled closing process		✓	✓
IRT-controlled pre-drying		✓	✓
IRT-controlled cooling process			✓
Gloss adjustment assistant			✓
Bluetooth hands-free phone system			✓
<b>Temperature calibration</b>			
Automatic double-range temperature calibration (ATK2)		✓	✓
<b>Design and ergonomics</b>			
Integrated holder for firing tongs	✓	✓	✓
Large cooling tray	✓	✓	✓
<b>Ports</b>			
USB flash drive	1	3	3
SD card reader		✓	✓

[4] Consumables excluded

