

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.



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
- ✓ Preset programs and material groups

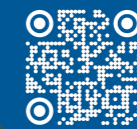
Intuitive
operation

- ✓ 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



Device monitoring, anytime and anywhere

Monitor your Ivoclar devices from anywhere with Ivoclar Monitoring. Receive real-time updates and push notifications for your Programat furnaces.^[1] It is smart, transparent and completely free of charge.



FIND OUT MORE

<http://ivoclar.com/ivoclar-monitoring>



[1] Continuous online connection and activated IoT function of the devices are mandatory for Ivoclar Monitoring. Available for Programat milling machines and Programat furnaces in selected countries. For a detailed list of all compatible devices, access the product page directly by scanning the QR code.

High process reliability due to infrared technology (IRT)^[2]

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.

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

Cooling process controlled by IRT^[3]

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.

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.

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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 Programat USB flash drive Various accessories	Power cord Vacuum hose Programat firing tray kit 2 Automatic Temperature Checking Set ATK2 (test set) Programat USB flash drive Programat WLAN Kit DSA holder kit Various accessories	Power cord Vacuum hose Programat firing tray kit 2 Automatic Temperature Checking Set ATK2 (test set) Programat USB flash drive Programat WLAN Kit DSA holder kit A-D shade guide
Recommended accessories			
(Not part of the delivery form)	Temperature Checking Set 2 Vacuum pump VP3 easy or VP5 Firing tongs	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 Ceram

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

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

IPS Style Ceram 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



	P710 G2	P510 G2	P310 G2
Warranty			
Warranty period ^[4]	2 years	3 years	3 years
Hardware equipment			
Colour touchscreen display with membrane-sealed keypad	✓	✓	✓
QTK2 muffle technology with SiC bottom reflector	✓	✓	✓
OSD with progress indicator	✓	✓	✓
Programat infrared technology (IRT)		✓	✓
Software equipment			
Individual programs	300	500	700
Preset Ivoclar programs	✓	✓	✓
Power Saving Technology	✓	✓	✓
Integrated maintenance and diagnostic programs (e.g. heater)	✓	✓	✓
System to bridge short power interruptions	✓	✓	✓
Software update via USB flash drive and cable	✓	✓	✓
Picture Manager via notebook/PC		✓	✓
Integrated multimedia functions		✓	✓
Integrated program copy assistant		✓	✓
Digital shade assistant (DSA)		✓	✓
IRT-controlled pre-drying		✓	✓
IRT-controlled cooling process			✓
Gloss adjustment assistant			✓
Bluetooth hands-free phone system			✓
Temperature calibration			
Automatic double-range temperature calibration (ATK2)		✓	✓
Ports			
USB flash drive	1	3	3
SD card reader		✓	✓

[4] Wear parts and consumables excluded

