# Comparison of Technical Properties Programat®

P310 G2

P510 G2

P710 G2

| | P310 G2 | P510 G2 | P710 G2 |
|---|---|---|---|
| **Hardware Features** | | | |
| Widescreen colour display | 4.3" | 7" | 7" |
| Membrane-sealed keypad & touch display operation | ✓ | ✓ | ✓ |
| QTK 2 muffle technology | ✓ | ✓ | ✓ |
| SIC bottom reflector | ✓ | ✓ | ✓ |
| Double-valve vacuum technology | ✓ | ✓ | ✓ |
| OSD with status indicator and explanation | ✓ | ✓ | ✓ |
| Optic package | ✓ | ✓ | ✓ |
| OSD with progress indicator | – | ✓ | ✓ |
| Programat Infrared Technology IRT | – | ✓ | ✓ |
| Programat WLAN Kit* | – | ✓ | ✓ |
| Integrated stereo speakers | – | ✓ | ✓ |
| Programat Bluetooth Kit* | – | – | ✓ |
| Microphone | – | – | ✓ |
| **Software Features** | | | |
| New operating concept with modern icons | ✓ | ✓ | ✓ |
| Language options of software | 25 | 25 | 25 |
| Preset Ivoclar Vivadent programs | ✓ | ✓ | ✓ |
| Individual programs | 300 | 500 | 700 |
| Individual programs on USB flash drive | 300 | 500 | 700 |
| Different operating modes | ✓ | ✓ | ✓ |
| Predrying program (indiv. time/temp.) | ✓ | ✓ | ✓ |
| Vacuum assistant (–1 °C below T) | ✓ | ✓ | ✓ |
| Noise-reduced operation of vacuum pump | ✓ | ✓ | ✓ |
| Power Saving Technology | ✓ | ✓ | ✓ |
| Integrated voltage indicator | ✓ | ✓ | ✓ |
| Electronic Vacuum Control System (EVCS) | ✓ | ✓ | ✓ |
| Program bypass in case of power failure | ✓ | ✓ | ✓ |
| Muffle cleaning program | ✓ | ✓ | ✓ |
| Dehumidification program | ✓ | ✓ | ✓ |
| Modern signal tunes | ✓ | ✓ | ✓ |
| Remote diagnostics via diagnostic file | ✓ | ✓ | ✓ |
| Integrated test programs (e.g. heating, vacuum, etc.) | ✓ | ✓ | ✓ |
| Display of notes and errors with text | ✓ | ✓ | ✓ |
| Operation and programming via notebook/PC | ✓ | ✓ | ✓ |
| Firing protocols for QA via notebook/PC | ✓ | ✓ | ✓ |
| Software update via USB flash drive and cable | ✓ | ✓ | ✓ |
| IoT connectivity | ✓ | ✓ | ✓ |
| Software update via WLAN | – | ✓ | ✓ |
| Picture Manager via notebook/PC/Programat App | – | ✓ | ✓ |
| Preset timer function | – | ✓ | ✓ |
| Integrated program copy assistant | – | ✓ | ✓ |
| IR camera-operated closing process | – | ✓ | ✓ |
| IR camera-operated predrying | – | ✓ | ✓ |
| IR camera-operated cooling process | – | – | ✓ |
| MP3 and video player | – | ✓ | ✓ |
| Picture viewer | – | ✓ | ✓ |
| PDF viewer | – | – | ✓ |
| DSA - Digital Shade Assistant | – | ✓ | ✓ |
| Glazing function assistant | – | – | ✓ |
| Bluetooth handsfree set | – | – | ✓ |
| Audio response in 25 languages | – | – | ✓ |
| 3-step heating | – | – | ✓ |
| 2-step cooling | – | – | ✓ |
| **Temperature Calibration** | | | |
| Calibration | Manually | Automatically | Automatically |
| Adjustable calibration interval | ✓ | ✓ | ✓ |
| Automatic double-range calibration ATK2 | – | ✓ | ✓ |
| **Design and Ergonomics** | | | |
| Large cooling tray | ✓ | ✓ | ✓ |
| Integrated tong holder | ✓ | ✓ | ✓ |
| Removable furnace head | ✓ | ✓ | ✓ |
| Integrated cable duct | ✓ | ✓ | ✓ |
| Swivel keypad unit | – | ✓ | ✓ |
| **Connections** | | | |
| USB | 1 | 3 | 3 |
| USB host | ✓ | ✓ | ✓ |
| Ethernet (LAN) | ✓ | ✓ | ✓ |
| SD Card Reader | – | ✓ | ✓ |
| Audio connections (in/out) | – | ✓ | ✓ |
| **Technical Data** | | | |
| 200 – 240 V / 50 – 60 Hz | ✓ | ✓ | ✓ |
| 110 – 120 V / 50 – 60 Hz | ✓ | ✓ | ✓ |
| Max. power consumption at 110 – 120 V (Ampere) | 12 | 12 | 12 |
| Max. power consumption at 200 – 240 V (Ampere) | 8.5 | 8.5 | 8.5 |
| Max. heating rate | 140 °C/min | 140 °C/min | 140 °C/min |
| **Warranty** | | | |
| Warranty Period* | 2 years | 3 years | 3 years |

✓ Standard delivery form
– not available
* excluding consumables

Date information prepared: 2021-04

ivoclar vivadent®