GTECHNOLOGIES GROUP

Innovation | Creativity | Flexibility

GIARDINA GRAPHIC

DRY-INKJET

UV LED PINNING SYSTEMS

THE TECHNOLOGY

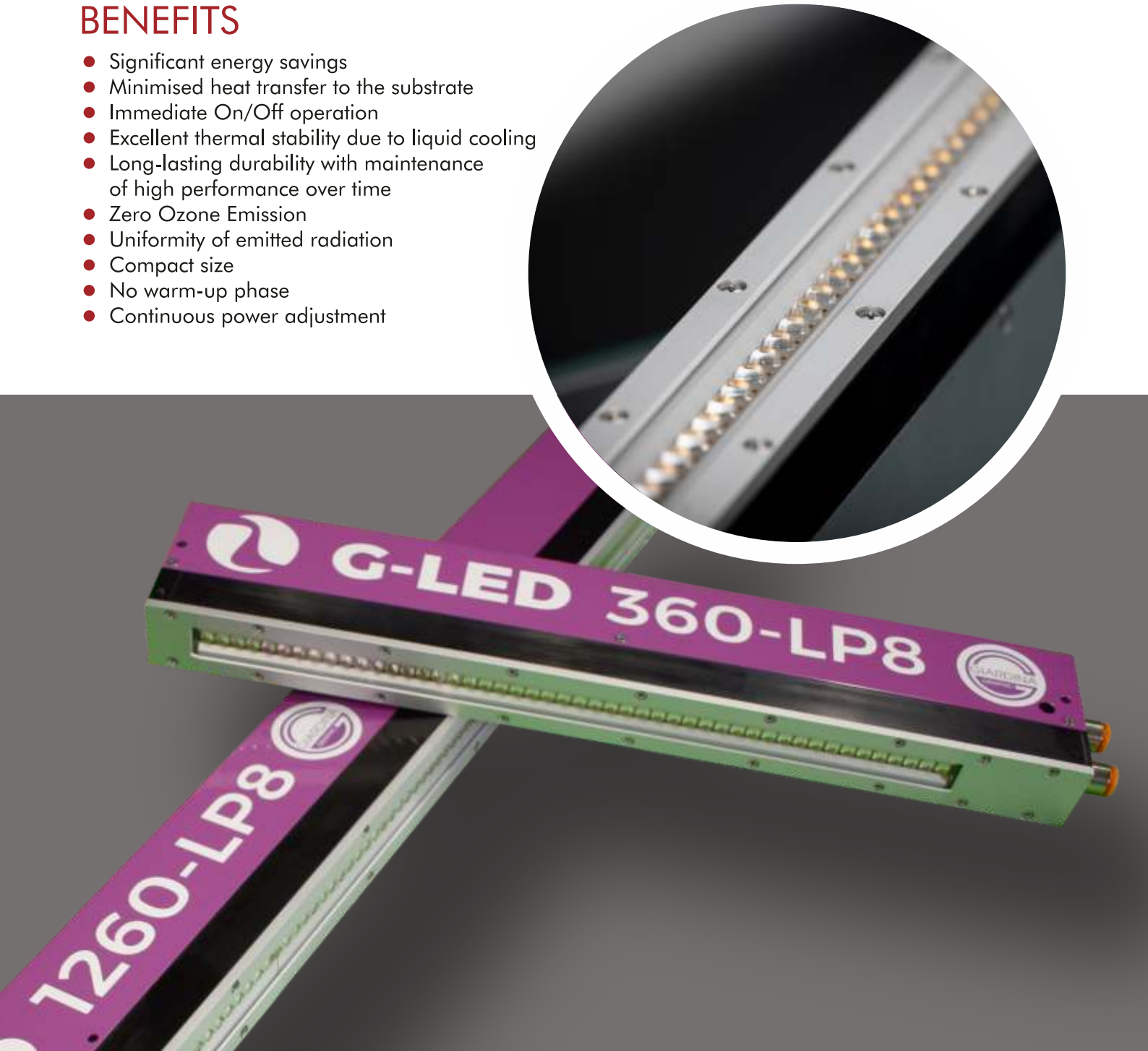
UV LED pinning technology, which is used among inkjet heads, provides the right quantity of UV energy to control the dot gain and to obtain a wide range printing effects at high speeds. UV LED can be used also for the complete curing of digital inks in bidirectional, single-pass and 3D printers to create products such as posters, labels, signage, packaging, and 3D objects.

G-LED LP8 now develops a specific power equal to 8 W/cm^2. The manufacturing technique developed by G Technologies R & D department is based on the basics of COB (Chip on Board) made of beryllium copper, fixed on an aluminium plate cooled by temperature-controlled refrigerant fluid. Each COB is 21x60mm in size and contains No. 8 primary lenses of 9.5 W each.

The COBs can be turned on and off as often as needed without a heating and cooling phase. The entire system is monitored by a control PLC interfaced with the printing press. G-LED LP8 is applicable on existing UV systems by dedicated retrofit and is available in various wavelengths between 365 nm and 405 nm. G-LED LP8 can be used for intermediate and final curing of inks, varnishes and adhesives in industrial processes in the digital printing world.

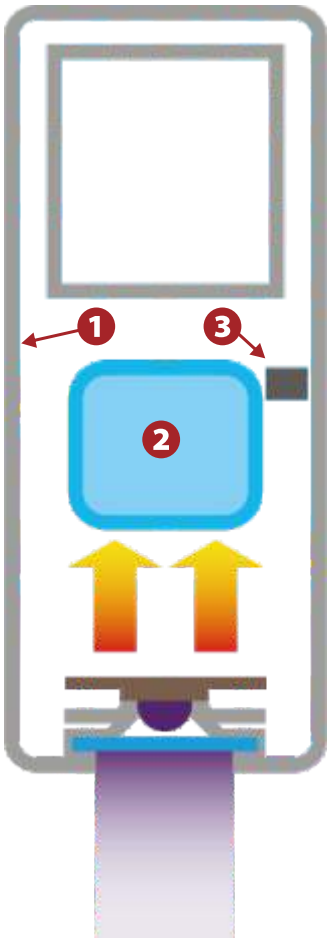
BENEFITS

- Significant energy savings
- Minimised heat transfer to the substrate
- Immediate On/Off operation
- Excellent thermal stability due to liquid cooling
- Long-lasting durability with maintenance of high performance over time
- Zero Ozone Emission
- Uniformity of emitted radiation
- Compact size
- No warm-up phase
- Continuous power adjustment



COMPACT • STURDY • RELIABLE

1. Thanks to a sturdy design the LEDs are protected in any situation and its small profile size (mm 36 x 82H) allows it to be installed on any machine
2. Thanks to a refined and tested cooling system through coolant, efficiency and long-term durability are ensured
3. Built-in temperature sensors constantly monitor the LEDs to ensure proper operation



TECHINICAL FEATURES

Max. electrical power	12 W/cm
Wavelength	395 nm*
Specific power	8 W/cm2
Operation	On/Off
Cooling	Coolant
Max. length	1850 mm
Typical section	36mm W x 82mm H
Max. Operating temperature	40°C (104°F)
Max. standard humidity	Non-condensing
Average diode life	> 20.000 hours
Separate ignitions	widths > 1000 mm

* 365, 385 e 405 nm available upon request

CONTROL AND COMMAND

Power supplies placed in specific containment rack cabinets, are the object of a careful design which ensure high quality and safety standards to guarantee protection against temperature changes, environmental overheating and humidity, possible accidental shocks, contamination by dust, ink mist and other contaminants.

An advanced function HMI touch screen interface, provided with an extremely intuitive design, allows:

- Individual selection of the UV modules to be used
- Independent power selection of each G-LED UV module
- Information on hours of use of individual units and the entire system
- Self-diagnostics and alarm warning
- «MONEY CHECK» function to view with display of instantaneous and cumulative energy usage
- Storage and selection of recipes for production cycles
- Data management and integration with company network
- Remote assistance system GT-CONNECT

GLOBAL DRYING SOLUTIONS

- UV SYSTEMS
- IT-UV SYSTEMS
- UV LED SYSTEMS
- HOT-AIR SYSTEMS
- INFRARED SYSTEMS
- LABORATORY SYSTEMS
- ROLLER COATING SYSTEMS
- CONTROL AND MANAGEMENT SYSTEMS
- EXCIMER SYSTEMS
- OPTIONAL COMPONENTS

High Quality Solutions for Printing Industry

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