

**IO.JET®**

**LEIBINGER**

The first intelligent coding & marking system.

Plug & Print. 5 years no maintenance.  
Printing, printing, printing...






**LEIBINGER.**  
**Leading the way in intelligent coding & marking.**

We have been working on extraordinary solutions for decades. Taking on the challenge again and again to continue making these solutions even better. Solutions that reflect a clear vision. Solutions that are easier, smarter and more reliable. The new IQJET was designed to raise the benchmark once again – with superior intelligence. To lighten your workload, make your job easier and give you peace of mind.

**Tens of thousands of satisfied customers confirm that we are on the right track and drive us to pursue our vision.**

  
Christina Leibinger, CEO Leibinger

The new IQJET.  
Intelligent technologies for your peace of mind.

The IQJET does exactly what it's supposed to – print non-stop – with absolute reliability and consistently high quality. 5 years with no need for maintenance by design. Just switch it on and go. No need for constant cleaning, no start-up problems and no downtime. How did we achieve this? With IQ. Intelligent technologies that do most of the work for you. Making you more efficient and giving you the confidence that everything is always under control.

The IQJET gives you peace of mind.

CONTENT

IQPRINT	Page 6
SMART.OS	Page 8
SMART.EFFICIENCY	Page 10
SMART.CARE	Page 12

# 4 intelligent technologies make all the difference.



**SMART.OS**  
Intuitive operation

**SMART EFFICIENCY**  
Minimal operating costs

**SMART.CARE**  
5 years no maintenance

**IQ.PRINT**  
Maximum productivity



## IQPRINT - Intelligent ink management. Consistently high print quality without time-consuming cleaning.

With its unique IQPRINT, LEIBINGER has entirely reimagined inkjet technology. The exceptionally robust, reliable system always ensures the best print quality, short start-up times without the need for cleaning, and maximum availability in day-to-day operation. When not in use, IQPRINT automatically seals the entire ink system 100 % airtight and allows the ink to continue circulating. This prevents the ink from drying and the typical clogging that would otherwise occur. When the IQJET is switched on, it gets back to work immediately.

To ensure consistently high print quality regardless of the ambient conditions, IQPRINT permanently regulates ink temperature and viscosity.

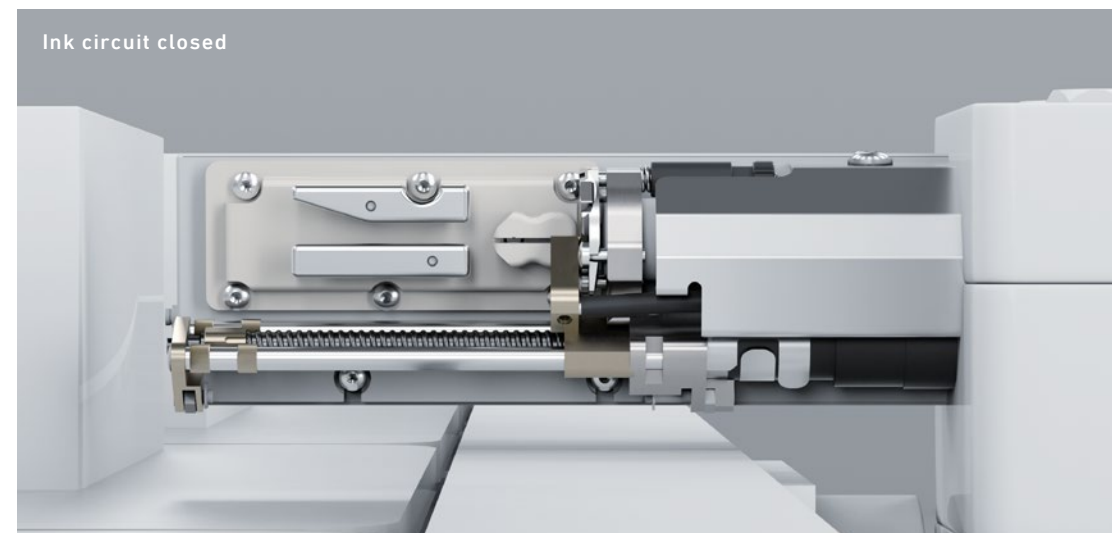
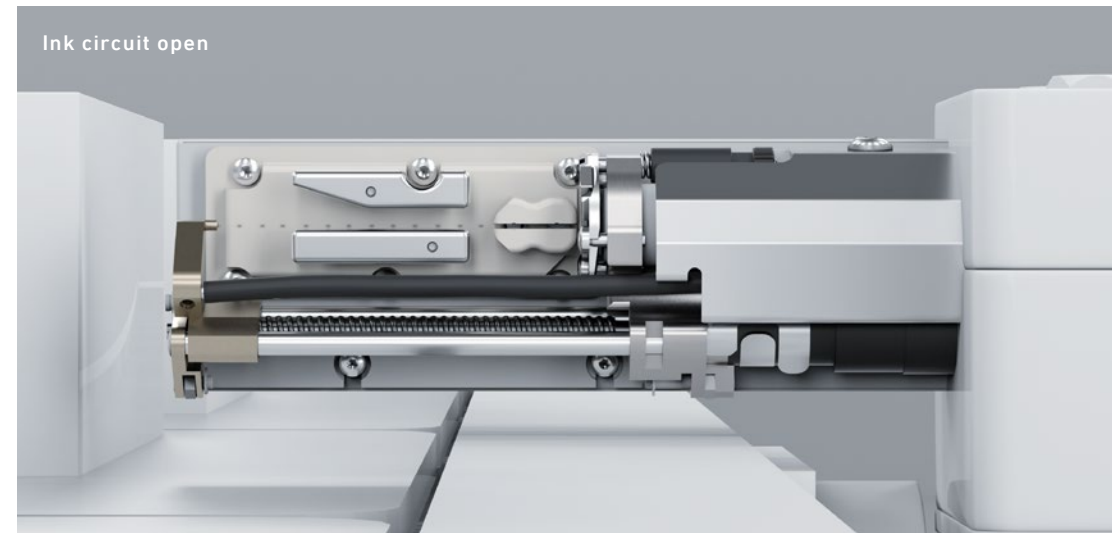
**The IQJET does exactly what it's supposed to: print non-stop for your peace of mind.**

### HOW YOU BENEFIT FROM IQPRINT:

- Quick start without cleaning
- Consistently high print quality
- Maximum productivity



Watch video:  
Explain IQPRINT to me



# SMART.OS – Intuitive operation. And simple system integration.

SMART.OS ensures that operation is easier and faster than ever before. The clearly laid out 10.1" touchscreen display can be adjusted to your requirements as needed. All necessary settings can be made with just a few clicks. In production operation, the IQJET displays key status information in color and visible from a distance. Animated, step-by-step instructions interactively explain the required work steps. This enables anyone, for instance, to replace consumables quickly and easily, even without prior knowledge.

It is also incredibly easy to integrate the IQJET into your production line. Several interfaces, including OPC UA, a built-in PLC and a visual wiring check verify whether the inputs and outputs are functioning as they should.

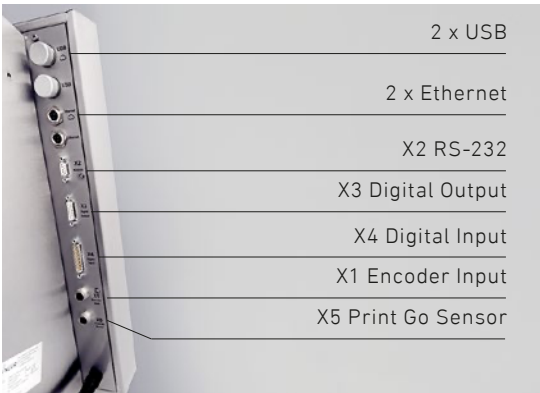
## Operation that supports you intuitively.



Watch video:  
Explain SMART.OS to me

HOW YOU BENEFIT FROM SMART.OS:

- Fast operating processes
- No need for complicated user training
- Easy, cost-effective system integration



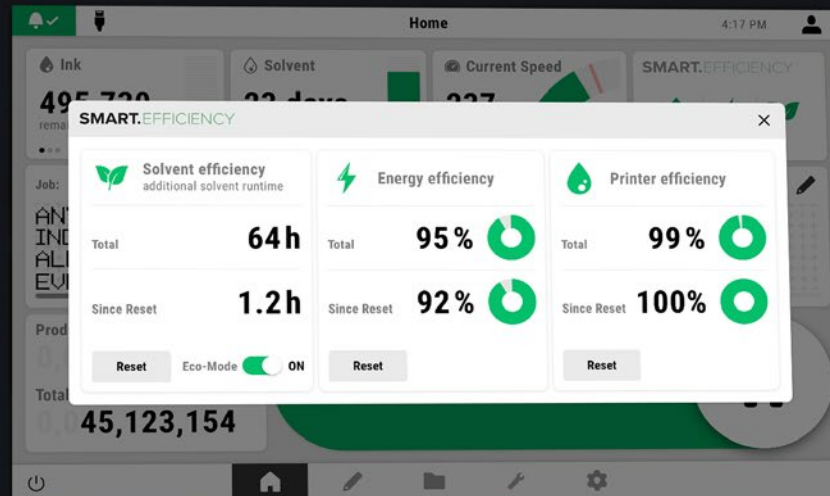
Interfaces



Status screen visible from a distance

Dashboard – all relevant data at a glance





Watch video:  
Explain SMART.EFFICIENCY to me

#### HOW YOU BENEFIT:

- Low consumption of resources
- Optimum occupational health protection
- Minimal operating costs

SMART.EFFICIENCY – Minimizes costs.  
Up to 50%\* less solvent.

SMART.EFFICIENCY, with its unique Eco-Mode feature, automatically seals the ink circuit when not in use. This stops any solvent consumption. It also condenses evaporated solvent and feeds it back into the system. This results in up to 50% less consumption and emissions. The IQJET is also very economical in terms of energy consumption, using only 36 watts on average.

Another advantage is the new cartridge system: the XXL cartridges allow a large amount of printing before refilling, while at the same time extending reserve runtimes. A quick and safe exchange without mix-up is guaranteed. The cartridges empty to the last drop, so they also save ink. This saves money and the cartridges can simply be disposed of in the residual waste. All this, combined with exceptionally high availability, makes the IQJET the ultimate printing machine.

**SMART.EFFICIENCY. Protects the environment and saves costs.**

\* Compared with conventional CIJ printers



1. Condensation of solvent | 2. Mix-up-proof XXL cartridge system



## SMART.CARE – Unmatched operational reliability 5 years no maintenance.\*

The IQJET's excellent quality and reliability comes from using long-lasting, durable components, most of which are made at LEIBINGER's own factories in Germany, and strict quality control processes.

The new, sturdy print head is made with great precision. The singular design of our ink circulation system doesn't require a constantly running feed pump. This allows for smooth and gentle operation with minimal wear and tear. The unique Printhead Refresh feature always ensures the safe and clean removal of ink deposits and a well-maintained printhead – fully automatically.

And, when it's finally time for maintenance after 5 long years\*, you can do it yourself in no time and without requiring any special tools or prior knowledge – thanks to interactive step-by-step instructional videos. So you benefit from better planning and a significant advantage in terms of production time.

**Quality. Made in Germany.**

### HOW YOU BENEFIT FROM SMART.CARE:

- Exceptional reliability
- Long service life and peace of mind
- Lowest possible TCO



Watch video:  
Explain SMART.CARE to me

\* Time frame may vary depending on operating time, ink type and ambient conditions.

Printhead Refresh



ANY PRODUCT  
INDIVIDUAL CODES  
ALL INDUSTRIES  
EVERY MATERIAL

up to 48 dots

## The IQJET – For high-contrast printing. Productivity you can always count on.

Whenever excellent legibility on dark surfaces is required, you need pigmented inks. Processing them is one of the biggest challenges for conventional CIJ printers. But not for the IQJET. To prevent the pigments from settling in the ink tank, the IQJET periodically stirs the ink. Moreover, the IQPRINT's unique ink circulation system prevents clogging of the ink lines and print nozzle. This guarantees outstanding reliability, print quality and productivity in day-to-day operation.

LEIBINGER offers a wide selection of pigmented inks to meet the requirements of virtually all needs. We will be happy to advise you on your specific application.

**LEIBINGER, the solution specialist in high-contrast printing.**



### HOW YOU BENEFIT:

- High contrast legibility
- Highest level of production reliability
- No complicated service work



# LEIBINGER Connect – Everything at a glance. Industry 4.0 at your fingertips.

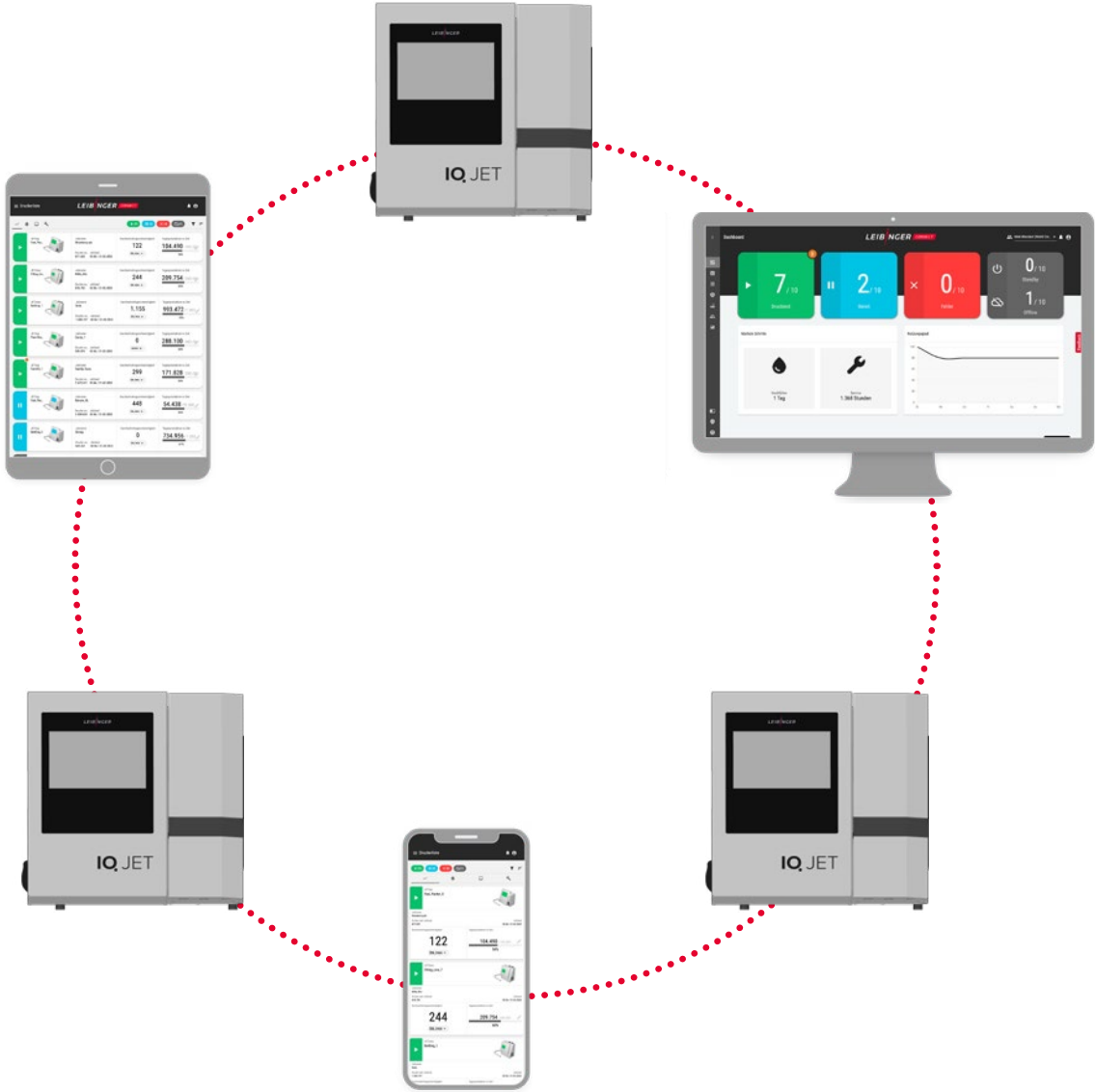
With LEIBINGER Connect, you always have everything you need in view: current printer status, preview of required actions such as “refill ink”, consumables yield and even production performance. Push messages keep you informed on important printer status updates and, by means of historical data, you can analyze the potential for production optimization. A state-of-the-art cloud system ensures a high-performance connection to all linked LEIBINGER printing systems via LAN or cellular network (LTE).

If you wish, you can simply integrate your service partner and enjoy the best in carefree convenience. They will then have everything under control so that your printers can do what they are supposed to do: printing, printing, printing ...

**Always plugged in to your production with LEIBINGER Connect.**

**HOW YOU BENEFIT:**

- Time savings
- Always up to date on key information
- Minimized downtime



4 intelligent technologies.  
To minimize your operating costs.



Scan to open the online TCO calculator.



Application example\*\*: Plastics extrusion  
Basic assumptions: 4'000 operating hours per year, 250 prints per minute, 25 characters per print

Cost advantage with IQJET	Basis of calculation		Your savings in 5 years*	Calculate your return
<b>Electricity:</b> Over 60%* savings on electricity costs with SMART.EFFICIENCY.	Conventional electricity costs at 100 watts:	400 kWh / year	1'280 kWh	x your electricity cost
	Electricity costs with SMART.EFFICIENCY at 36 watts:	144 kWh / year		
<b>Solvent:</b> 50%* less solvent consumption thanks to recovery and the unique Eco-Mode, which automatically seals the ink circuit when not in use, so the consumption is stopped.	Conventional solvent costs:	6.3 gal (23.8 l) / year	15.7 gal (59.5 l)	x your cost for 1 gal / l of solvent
	Solvent costs with SMART.EFFICIENCY:	3.1 gal (11.9 l) / year		
<b>Ink:</b> 5%* less ink consumption. The new XXL cartridges ensure complete emptying of the cartridges.	Conventional ink costs:	4.2 gal (16 l) / year	1.1 gal (4 l)	x your cost for 1 gal / l of ink
	Ink costs with SMART.EFFICIENCY:	4.0 gal (15.2 l) / year		
<b>Time outlay:</b> No time-consuming cleaning at start-up or shut-down. IQPRINT ensures automatic sealing of the nozzle as well as the entire ink circuit, so an immediate clean start-up is always guaranteed.	Conventional time outlay		105 hours	x your labor cost
	5 min / day x 250 days: Time outlay with IQPRINT:	21 hours / year Not applicable		
<b>Maintenance:</b> No maintenance costs for 5 years.	Conventional maintenance costs:	One PM / year	4 PMs	x your maintenance cost
	Maintenance costs with SMART.CARE:	Not applicable		
<b>Availability:</b> More productive time by avoiding regular care measures (e.g. start-up procedures etc.), printhead cleaning routines or unplanned donwime due to part failures (e.g. pressure pump).			200 hours / year	x your cost of downtime
	10 min / day equal 1%* more productive time:	40 hours / year		

\* Compared to conventional CIJ printers, depending on application and ambient conditions | \*\* Sample calculation, may vary depending on the application

IQPRINT, SMART.OS, SMART.EFFICIENCY and SMART.CARE will go a long way towards minimizing both your downtime and your operating costs. You'll benefit from reduced resource consumption, long service and ink reserve lifespans, ultra-low maintenance costs and significant time savings – thanks to reliable printing operation and a quick production start.

You can look forward to your LEIBINGER IQJET paying for itself in record time. Simply calculate your savings yourself or contact us at [info@leibinger-group.com](mailto:info@leibinger-group.com).

Application example\*\*: Fast Moving Consumer Goods (FMCG)  
Basic assumptions: 4'000 operating hours per year, 400 prints per minute, 20 characters per print

Cost advantage with IQJET	Basis of calculation		Your savings in 5 years*	Calculate your return
<b>Electricity:</b> Over 60%* savings on electricity costs with SMART.EFFICIENCY.	Conventional electricity costs at 100 watts:	400 kWh / year	1'280 kWh	x your electricity cost
	Electricity costs with SMART.EFFICIENCY at 36 watts:	144 kWh / year		
<b>Solvent:</b> 50%* less solvent consumption thanks to recovery and the unique Eco-Mode, which automatically seals the ink circuit when not in use, so the consumption is stopped.	Conventional solvent costs:	6.3 gal (23.8 l) / year	15.7 gal (59.5 l)	x your cost for 1 gal / l of solvent
	Solvent costs with SMART.EFFICIENCY:	3.1 gal (11.9 l) / year		
<b>Ink:</b> 5%* less ink consumption. The new XXL cartridges ensure complete emptying of the cartridges.	Conventional ink costs:	5.4 gal (20.4 l) / year	1.3 gal (5 l)	x your cost for 1 gal / l of ink
	Ink costs with SMART.EFFICIENCY:	5.1 gal (19.4 l) / year		
<b>Time outlay:</b> No time-consuming cleaning at start-up or shut-down. IQPRINT ensures automatic sealing of the nozzle as well as the entire ink circuit, so an immediate clean start-up is always guaranteed.	Conventional time outlay		105 hours	x your labor cost
	5 min / day x 250 days: Time outlay with IQPRINT:	21 hours / year Not applicable		
<b>Maintenance:</b> No maintenance costs for 5 years.	Conventional maintenance costs:	One PM / year	4 PMs	x your maintenance cost
	Maintenance costs with SMART.CARE:	Not applicable		
<b>Availability:</b> More productive time by avoiding regular care measures (e.g. start-up procedures etc.), printhead cleaning routines or unplanned donwime due to part failures (e.g. pressure pump).			200 hours / year	x your cost of downtime
	10 min / day equal 1%* more productive time:	40 hours / year		

\* Compared to conventional CIJ printers, depending on application and ambient conditions | \*\* Sample calculation, may vary depending on the application



## Sustainability with LEIBINGER. Saving resources with intelligence.

LEIBINGER has been acting responsibly and sustainably for decades. Our contribution to sustainability begins as early as in product development, where we research new resource-saving solutions. This commitment continues through our sustainable production using renewable energies and state-of-the-art manufacturing facilities, as well as efficient distribution logistics.

The new IQJET is the result of this commitment. Thanks to the intelligent IQPRINT, SMART.EFFICIENCY and SMART.CARE technologies, the consumption of valuable resources is reduced more than with any other conventional CIJ printer. Energy, solvent and ink consumption are reduced to an absolute minimum and the IQJET's outstanding reliability eliminates unnecessary waste and makeready waste. This protects the environment and saves significant costs.

**LEIBINGER IQJET. For the sake of the environment.**

### HOW YOU BENEFIT:

- Optimized ecological footprint
- Minimum resource consumption
- Significant cost savings





# LEIBINGER is your solution specialist. Excellence in coding & marking.

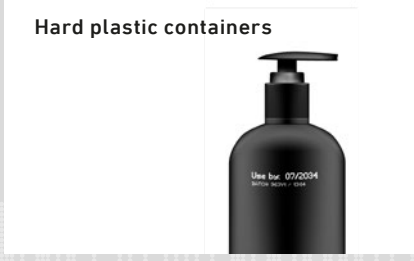
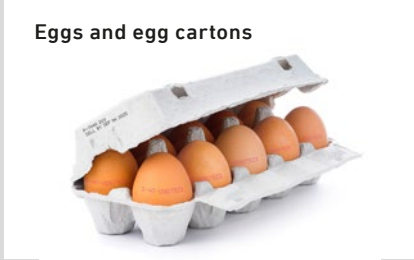
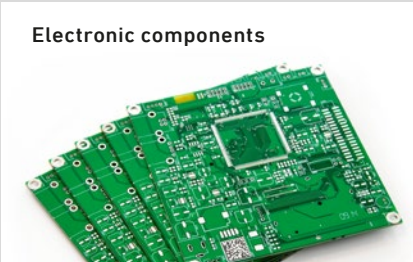
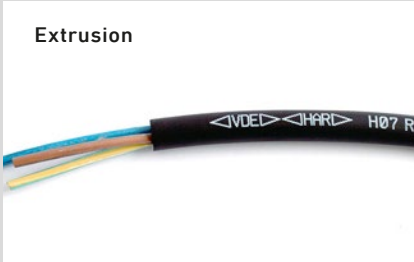
What would you like to print? Texts, logos or codes? On what type of surface? At what speed? In what kind of production environment? We look forward to giving you the confidence of knowing that we can offer you exactly the right solution for your specific needs.

In addition to the very best coding & marking technology from LEIBINGER, it is decisive that the ink and solvent are precisely matched to the application. This is the only way to achieve your goals, such as excellent legibility, abrasion resistance, drying time and adhesion, all the way through to meeting special requirements such as fluorescence or temperature-dependent color changes. LEIBINGER has decades of experience in the development and production of high-quality inks. And you will greatly benefit from this expertise.

So that you can achieve your goals with confidence.

## HOW YOU BENEFIT:

- Solutions tailored to your needs
- Best print quality and performance
- Excellent quality control



# LEIBINGER IQJET.

Details make all the difference.

**8-line quality printing:** The IQJET prints 50% more content compared with conventional CIJ printers. You can print up to 8 lines, large 1D/2D codes, complex logos and graphics, with higher resolution and the best font quality.

**Automatic nozzle seal:** Seals the nozzle airtight as well as the gutter and the entire ink return suction line. This eliminates clogging and ink drying. And the IQJET is always ready to print.

**Quick-loading cartridge system:** The IQJET is easily supplied with ink and solvent from frontal access. An intelligent protective feature prevents mix-ups and makes sure that the right consumables are used.

**XXL ink tank and reserve:** Up to 500\* operating hours are possible with a single tank filling. Even once the refill message is displayed, the IQJET continues to run for up to 100\* hours. More than enough time to order and refill.

**Ink temperature control:** To eliminate temperature fluctuations in the working area and any negative impact on print quality, the ink temperature is precisely controlled at all times.

**Hydraulic ink circulation:** An intelligent hydraulic system keeps the pressure in the ink circuit constant while protecting the pressure pump. This avoids high wear and tear and eliminates regular, expensive pump replacements.

**Printhead Refresh:** The Printhead Refresh function entirely removes impurities, such as ink dust, without the need for manual cleaning. The operator does not come into direct contact with solvent.

**Power outage protection (option):** A sudden power failure of a few seconds is simply ignored and bridged. If it should last longer, the IQJET switches off in a way that is controlled so that everything can function as usual when it is restarted.

**Quality. Made in Germany:** A IP56-compliant, stainless-steel housing, protected against water and dust, ensures exceptional durability and reliability. The IQJET is also water-jet-proof. Optionally, the IQJET is available with IP66 protection. Neither IP56 nor IP66 requires external compressed air.

**Highly flexible umbilical:** Modern data transmission technology enables a significantly smaller bending radius and increased umbilical torsional capacity. This facilitates installation even in previously inaccessible spots. It also eases integration and increases reliability when the print-head is in motion.

**Integrated PLC:** The integrated programmable logic controller (PLC) facilitates the integration of the IQJET even in complex and highly automated systems. Logical signal links can be created quickly and easily.

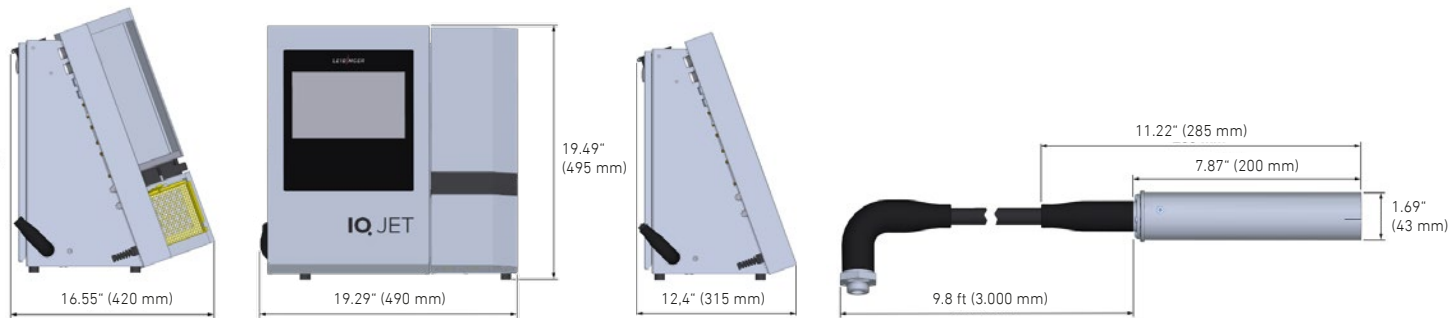
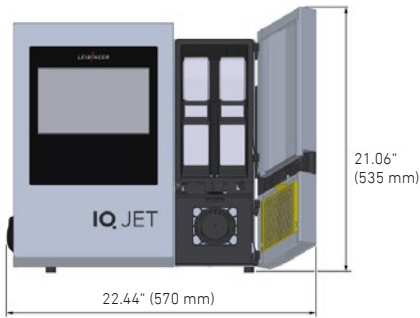
**Interfaces for integration:** The IQJET is equipped with all commonly used interfaces, including OPC UA. This enables easy integration into any production line.

**SelfService with operator assistant:** It's extremely easy, for instance, to change filters yourself without tools or prior knowledge, thanks to realistic, interactive, 3D-animated step-by-step instructions on the printer display. This eliminates waiting times for customer service.

\* Depending on the application and ambient environment

THE IQJET.  
Always the best solution to meet your needs.

Numerous functions, options and equipment variants – to meet virtually all requirements – make the IQJET the ultimate printing machine. We look forward to advising you personally. Simply contact us at [info@leibinger-group.com](mailto:info@leibinger-group.com).



TECHNICAL DATA	IQJET	IQJET for pigmented inks
<b>Printer and printhead:</b>		
Voltage range	100–240 V AC, 50–60 Hz	100–240 V AC, 50–60 Hz
Power consumption (typical)	36 W	36 W
Protection type	IP56 (IP66*)	IP56 (IP66*)
Empty weight, including printhead	51 lbs (23.15 kg)	51 lbs (23.15 kg)
Umbilical length	9.8 ft (3 m) / 19.6 ft (6 m)*	9.8 ft (3 m) / 19.6 ft (6 m)*
Nozzle size	50 µm, 60 µm, 70 µm	60 µm, 70 µm
<b>Printing performance data:</b>		
Print height	0.05" - 0.5" (1,3 mm - 13,1 mm)**	0.05" - 0.5" (1,3 mm - 13,1 mm)**
Max. print speed	1,355 ft/min (413 m/min) (5-dot font, 10 CPI, 60 µm)	1,355 ft/min (413 m/min) (5-dot font, 10 CPI, 60 µm)
Up to 8 lines print	5-dot font	5-dot font
Up to 6 lines print	7-dot font	7-dot font
<b>Printing functions:</b>		
Fonts	5-dot to 48-dot	5-dot to 48-dot
Font width and font height	Can be set freely	Can be set freely
Umlauts, special characters, Asian, Cyrillic, Arabic and additional country-specific and user-defined fonts	Can be freely selected and combined	Can be freely selected and combined
Tower print	●	●

\* Optional | \*\* Depending on font and printing distance | ● Standard

TECHNICAL DATA	IQJET	IQJET for pigmented inks
<b>Print contents:</b>		
Fixed text, variable text, database processing	●	●
Graphics	●	●
All major barcodes and 2D codes	●	●
Counters with selectable counting increments and counting direction	●	●
Date, time and best before dates in various formats, with internal clock	●	●
Selectable replacements, shift codes	●	●
Automatic meter marking	●	●
<b>Signals and interfaces:</b>		
Encoder, print start, print-go-gate	●	●
Two-sensor speed measurement	●	●
Configurable inputs and outputs	●	●
Ethernet, USB, RS-232 serial interface	●	●
OPC UA protocol	●	●
Cloud connection via LAN or LTE	○	○

○ Optional | ● Standard



Competence Center EMEA, APAC

Paul Leibinger GmbH & Co. KG

Daimlerstrasse 14  
78532 Tuttlingen  
Germany

Phone +49 (0)7461 9286 0  
Fax +49 (0)7461 92 86-199  
@ info@leibinger-group.com



Competence Center  
North and South America

Paul Leibinger Inc.

2702 Buell Dr #2  
East Troy, WI 53120  
United States of America

Phone +1 (262) 642 4030  
Fax +1 (262) 642-4033  
@ customerservice@leibingerusa.com

