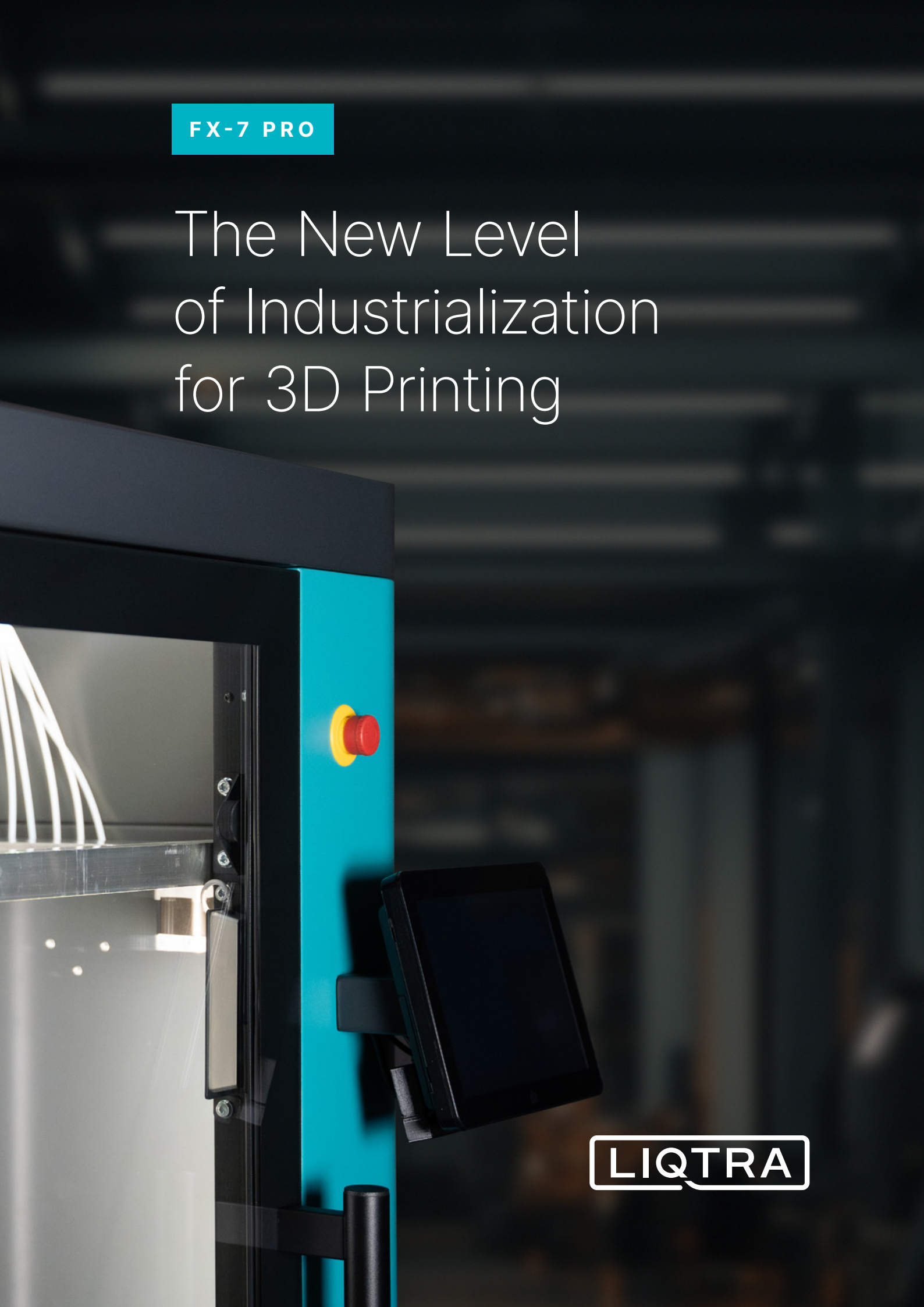
FX-7 PRO

The New Level of Industrialization for 3D Printing



LIQTRA

FX-Series:
Multi-Nozzle Technology Unlocks New Potentials

The combination of multiple nozzles for a single print job enables shorter production times and new applications, such as multi-material 3D printing.

Through a combination of breakthrough hardware and software, multi-nozzle technology enables high-productivity 3D printing. While conventional FFF print heads only use the material output of a single nozzle, LIQTRA's patented technology enables the simultaneous use of multiple nozzles, even when manufacturing parts with complex contours. Unlike 3D printing with with a single nozzle of a large diameter or thicker print layers, the multiplied material discharge does not compromise in accuracy. Despite the extreme increase in material output, corner radii and layer thickness stay unchanged in multi-nozzle technology. The drastic reduction in process time enables new applications that were previously not possible with single nozzle technology.

Advantages:

- **Multiplying productivity through multi-nozzle 3D printing**
- **Higher strength in the build-up direction due to increased heat input**
- **Lower energy consumption compared to single nozzle 3D printing**
- **Multi-material 3D printing allows new functional part designs**

Hardware Features

High Industrial Standards

1

Print head FX-7
The print head FX-7 is designed for multi-nozzle technology with up to seven nozzles for a fast 3D printing process. An independent nozzle with its own temperature control is integrated for support material.

2

Water-cooling unit
The simultaneous use of multiple nozzles requires advanced energy management for melting the filaments. The water-cooling unit ensures constant process conditions even with varying melting rates.

3

Closed build chamber
The insulation of the closed build chamber guarantees constant conditions and uniform heat distribution throughout the large build volume, resulting in better part quality, high part strength and a reliable 3D printing process.

4

Closed material storage
The material storage provides space for eight filament spools (1x large, 6x standard and 1x standard for support). The closed chamber allows the material to be stored at constant ambient conditions, minimizing water absorption.

High Usability

5

HMI
The 10” touch display allows the user to easily operate the machine. The intuitive UI which is consistent throughout the whole process chain, provides the customer with an excellent user experience.

6

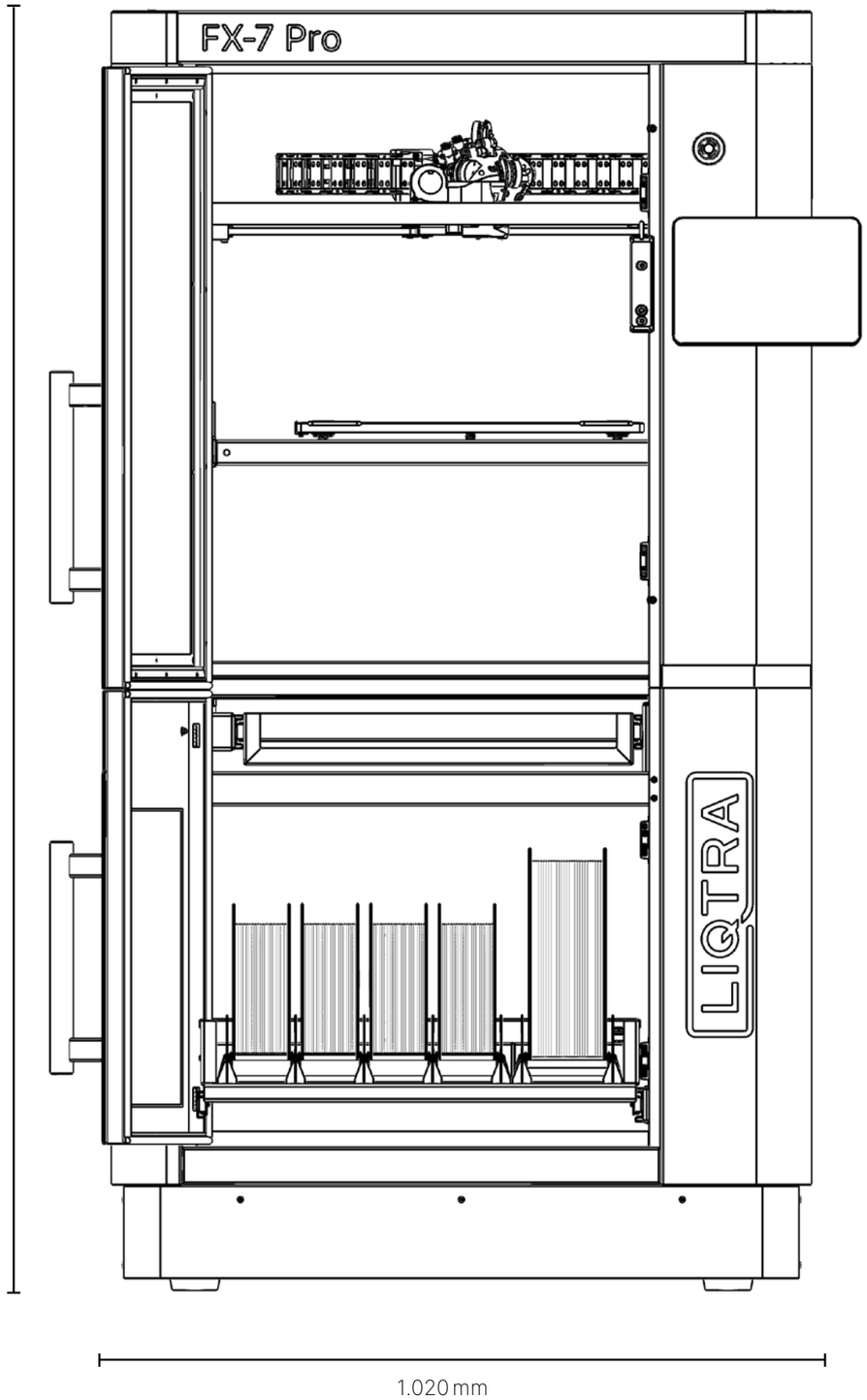
Status LED
The status LED uses different colors to indicate the status of the machine. This allows the user to easily recognize whether the 3D printing process is still running, has been successfully completed or if user input is needed.

7

Filter
The LIQTRA FX-7 Pro is designed for use in the office. A low noise level of the machine is provided by the high-quality housing. In addition, HEPA and activated carbon filters ensure odor-neutral operation.

8

Integrated tool drawer
Tools and accessories needed for printer operation can be stored in the integrated tool drawer to make daily work more comfortable. It is accessible when the build chamber is locked during printing processes.



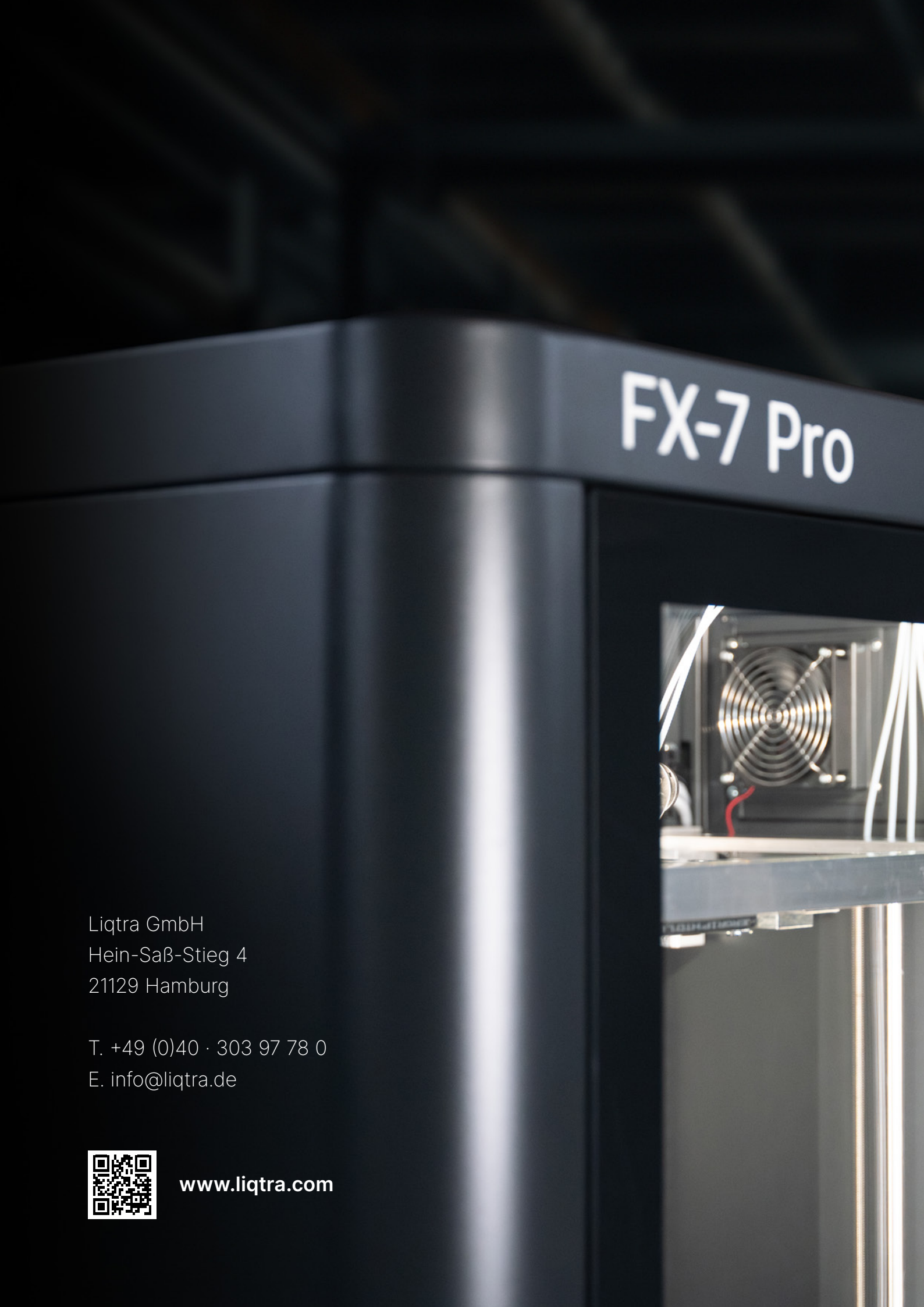
Technical Facts

Printer	
Printing volume	420 × 305 × 500 mm
Print bed temperature	max. 120 °C
Drive	Belt
Printer size	1.020 × 806 × 1.770 mm
Weight	270 kg
HMI	10“ Touchscreen

Printing System	
Print head	FX-7
Filament size	1,75 mm
Nozzle size	0,4 – 0,8 mm
Nozzle temperature	max. 400 °C
Cooling unit	Water-based

Materials	
Single nozzle mode	Standard polymer filaments
Multi-nozzle mode	PP, PP CF, P-TPO, PET, rPET, PET CF, PLA GF, PLA HT

Further Information	
Power supply	230 V, 50 Hz, 2 kW
Interfaces	Wifi, Ethernet
Certification	CE



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