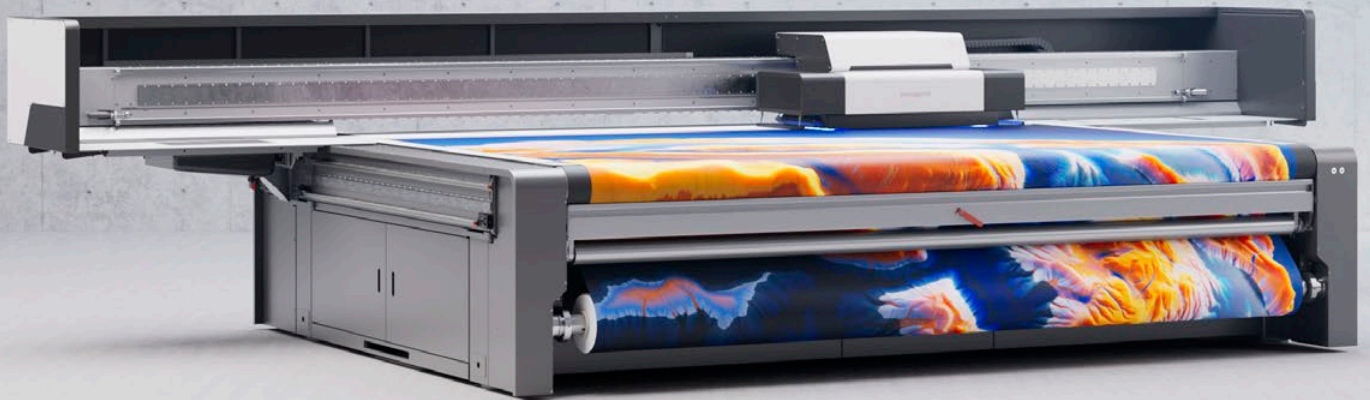# Kudu

High-End UV-LED flatbed printer

swissQprint

Kudu – performer by nature

Do you process large print volumes? Do your customers demand not only tight delivery times, but top quality as well? Then this flatbed printer is made for you: Kudu, the latest addition to the swissQprint family of printers. A precision machine giving you ample production capacity. And diversity beyond the norm.

High output with top quality

Kudu outputs up to 300 square metres per hour. A big part of this is due to three rows of print heads, supported by features that boost efficient working. Kudu takes you to another level of productivity and quality. You will impress with a maximum resolution of 1350 dpi.

10 colour channels, maximum freedom

As with any swissQprint model, you configure options and colour channels according to the ideas you have in mind. And with Kudu, you can supplement the process colours with up to six additional channels: light colours, white, varnish, orange, neon or primer for maximum application diversity.

Strong foundation, benchmark precision

Kudu stands on a solid base that was developed from scratch. It is the foundation for precise droplet placement – in combination with the latest linear drives and print heads currently available on the market. You can look forward to flawless print quality.

Kudu
The quality printer with extra capacity

Kudu is a top-rank producer: huge output with superb quality. On board and roll media. Ten freely configurable colour channels make it the most universal flatbed printer in the modular swissQprint range.

3.2 m

Flatbed
3.2 × 2 m

300 m²/h

Productivity
Day and night

1350 dpi

Resolution
Maximum quality

6

Colours in addition to CMYK
Endless possibilities

BUON
GIORNO

Single or dual roll option

Films, banner, mesh or other roll stock up to 180 kg, Kudu can handle them all – even the heat-sensitive ones thanks to LED curing. And that across the full printing width of 3.2 metres. Setting up and changing rolls is easy, and once the job is started the machine continues working without supervision. When necessary, multiple colour layers can be applied in one pass for pinpoint registration.

The integrated spreading roller helps prevent crashes by smoothing the material before it runs crease-free over the print bed and is rewound cleanly on the opposite side. This already stable system has a controller that ensures a flawless print image by continuously regulating the tension. The spreading roller also serves to dissipate static charge from the material, aiding precise droplet placement.

With the dual roll option the printer processes two rolls up to 60 inches at once. You spotted it: this doubles productivity, whether you are processing two identical or different designs.

Tandem

In tandem operation, machine and operator join forces for continuous, non-stop action: maximum productivity by the system, fitness training for personnel. The principle is straightforward: media can be loaded onto the printing table from both the front and rear. While printing is underway on one side, the operator loads the other side, and vice versa – so work continues without interruption.

The vacuum table has a front and a rear section. In addition, the Tip Switch Vacuum allows vacuum channels to be switched on and off segment by segment across both areas. Vacuum to the rear section can be shut off when normal jobs are being printed on the front section only – no masking needed.

Craft Beer

Craft Beer
since 2007

DARK

Regional

Craft Beer
since 2007

DARK

Regional

swissqprint

Tip Switch Vacuum

The Kudu vacuum table is segmented into 260 parallel channels, each with its own vacuum switch controllable at the touch of a finger – this is Tip Switch Vacuum (patent pending).

You can close any segment quickly, easily and precisely: both on the left or right of the media, and in the gaps between individual boards or rolls. There is no air leakage and no need for taping. The vacuum exerts full power exactly where it should and reliably holds down substrates of any size. All the while, it works quietly and energy-efficiently because the vacuum pumps are underpressure-controlled.

To help you keep track, each Tip Switch has a green or red indicator to show whether its segment is open or closed. You save a lot of time by simply switching off particular zones instead of covering them. This also adds even more efficiency when printing multiple copies, as well as when using the tandem print mode.

Lory, the output software
For intuitive working

The output software is intuitive, logical and process oriented. Helpful tools and features support you in working productively and efficiently. You have a great deal of freedom before pressing the start button. Even settings are possible that would normally require a new RIP run. You constantly keep track of things via the graphical user interface.

Just like Kudu, Lory is a 100 percent swissQprint in-house product. Based on decades of experience, designed and implemented throughout as a state-of-the-art software solution. We worked closely with RIP vendors during development. As a result, Lory integrates with end-to-end workflows and you exploit the full potential of process optimisation.

Lory is based on modern software architecture, so it is robust and open for the future. This in turn is a tremendous motivation for our software engineers, priming them to address and implement new market requirements as they arise. That means you as a user have the all-round optimal solution for today and tomorrow.

Graphical user interface

Assemble jobs by drag-and-drop on the virtual flatbed. You receive continuous visual feedback to get the most out of your print bed. You also stay flexible: Lory is there to assist should you decide to print an individual image or different files multiple times. And all of this without going back to the RIP.

Serial production

Setting up and processing larger print runs is easy with Lory. You create a layout and a file list just once, then Lory automatically inserts jobs into the placeholders and the print queue. That keeps the machine busy. Even in tandem mode, if you want. Here is an intelligent workflow solution that takes a major burden off the operator.

Statistics

Lory logs the complete job history. The data collected provides information for operational and order-related final costing: ink consumption, number of square metres printed, printing time per job or time period, etc. The economist in Lory thus supports you in opti-mising added value.

Colours
10 colour channels available

UV inks

The universal ink set typically bonds on acrylic, aluminium composite panels, wood, banners, polyester, polycarbonate, polystyrene, (rigid foam) PVC, vinyl films, flexible foam panels and numerous other media. This gives you enormous scope for applications. All the more so because Kudu has ten colour channels. No other printer gives you so much freedom in composing your colour palette.

We attach great importance to the environmental and health ramifications in the formulation of our inks. They are VOC and NVC free. They are also Greenguard Gold certified, which means that they meet strict criteria. Accordingly, the printed products are fine for use in schools and healthcare facilities. An opportunity for you to target new segments.

You can rely on consistent ink quality because our in-house ink lab tests every batch before it is despatched to customers.

Light colours

Light cyan, light magenta and light black reproduce natural skin tones, subtle gradients and shading. For fine art productions that live up to their name.
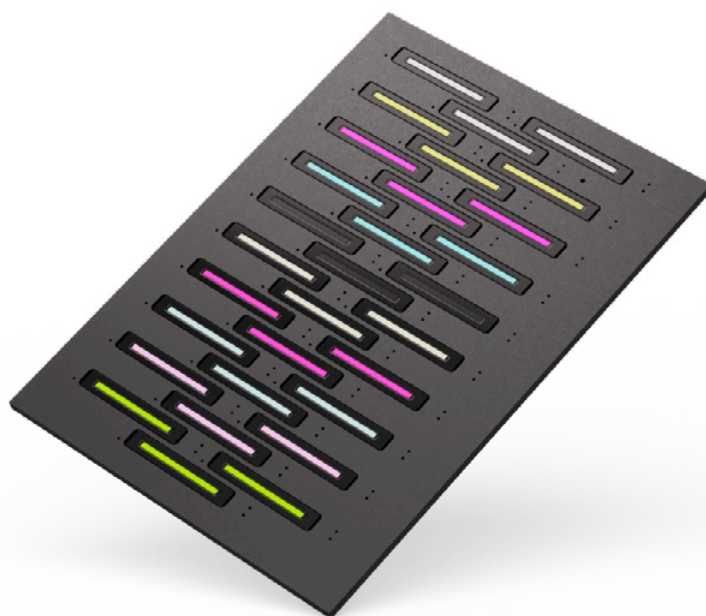
White, varnish, primer

White, as a base layer or printed selectively, is a highlight with transparent and dark media. Effect varnish, applied partially or across the whole substrate, produces visual and tactile experiences. Primer applies the foundation for printing onto glass and metal.

Process colours

Inkjet printing is as colourful as the world around us. The systems' CMYK standard is expandable, either when a printer is initially equipped or later when the requirements change. Ten freely configurable colour channels are available.

Orange

Orange significantly expands the colour gamut in orange and red tones. This helps to reproduce corporate colours even more accurately.

Neon

Attention grabbers: neon yellow and neon pink give printed materials that sensational look. And they are fluorescent in black light.

swissQprint Greentech
Economic printing with a clear conscience

swissQprint users generate high value while keeping their ecological footprint small.
That's because we see equal importance in maximum customer benefit and environmental protection.

Profitable LED technology

LED curing is cool. This means heat-sensitive media can
join the portfolio and open up lucrative markets. LED lamps
are always ready to go, with neither a warm-up nor a
cool-down time. In addition, they are mechanically robust
and maintenance-free. LED also pays dividends due
to high system availability and low maintenance requirements.

Economical and environmentally friendly

With swissQprint, you can print with a clear conscience,
keeping the environmental footprint small:
no ozone, barely any rejects or waste, and modest
maintenance requirements.

Certified energy efficiency

swissQprint LED systems are all proven to be highly
energy efficient (ISO 20690:2018). As an owner,
you can not only reckon with low operating costs but
also look forward to conserving valuable resources.

Features
Extras elsewhere, but standard from swissQprint

Cutting channel

The print bed incorporates a cutting channel that provides a defined trimming edge. So, out with the cutter and slice it through. The printed roll is cleanly detached, ready for finishing and delivery. And the rest is ready for the next job.

PSD compliant

swissQprint large format printers comply with the Fogra PSD. They can integrate with a PSD work-flow and deliver constant print quality with faithful colour results.

High-end linear drives

State-of-the-art linear drives aid precise droplet placement by moving the print beam and print head carriage fast and with micrometre precision.
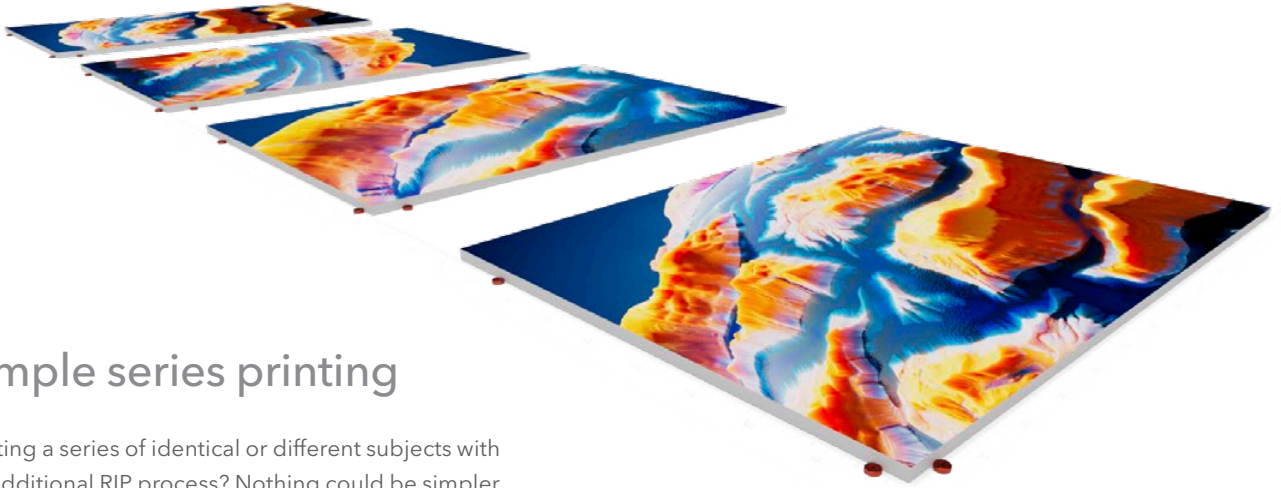
Media diversity

Acrylic, aluminium composite panels, wood, banners, polyester, polycarbonate, polystyrene, (high-density) PVC, flexible foam panels, glass and metal – all routine work with swissQprint. Printing onto difficult, heat-sensitive materials such as textiles, films and paperboard is equally stress-free.

Extras elsewhere, but standard from swissQprint

Simple series printing

Printing a series of identical or different subjects with no additional RIP process? Nothing could be simpler. In the output software, simply drag and drop files onto the virtual print bed and off you go.

Resume printing after a crash

Despite all precautions, there has been a crash, and that on the final few metres? It's not the end of the world. Via the output software, the operator resumes printing at the exact point where it stopped – and saves the day.

Light curtain

Should something or someone breach the light curtain at the beam, the print head carriage slows down to warn as well as protect the operator. Meanwhile, printing continues. There is no loss of time or material.

Registration pins

They are set in no time and help to make full and efficient use of the print bed: the swissQprint registration pins. Pegged onto a fine grid, they provide precise mechanical anchors on each side of the print bed. For any format and multiple copies.

Crash Sensors

Crash Sensor Technology prevents damage and rejects if the material thickness was entered incorrectly or corners on the medium are sticking out, for instance. The print head carriage stops if there is a hazard, and later continues at the exact pass position.

Applications
Amazing things made easy

Multilayer printing

Transparency can be highly effective: multilayer printing comprised of process colours, foundation layer, blocking layer, foundation layer, and process colours again. And it is so easy to achieve. The layers are printed in one pass, by the way. So they overlap exactly – no chance of bleed-through.

Effect varnish

To lend printed items that certain extra, there is effect varnish. The scope is vast: printed selectively or across the whole expanse, as a light or heavy layer, with a matte to high-gloss finish – everything is possible.
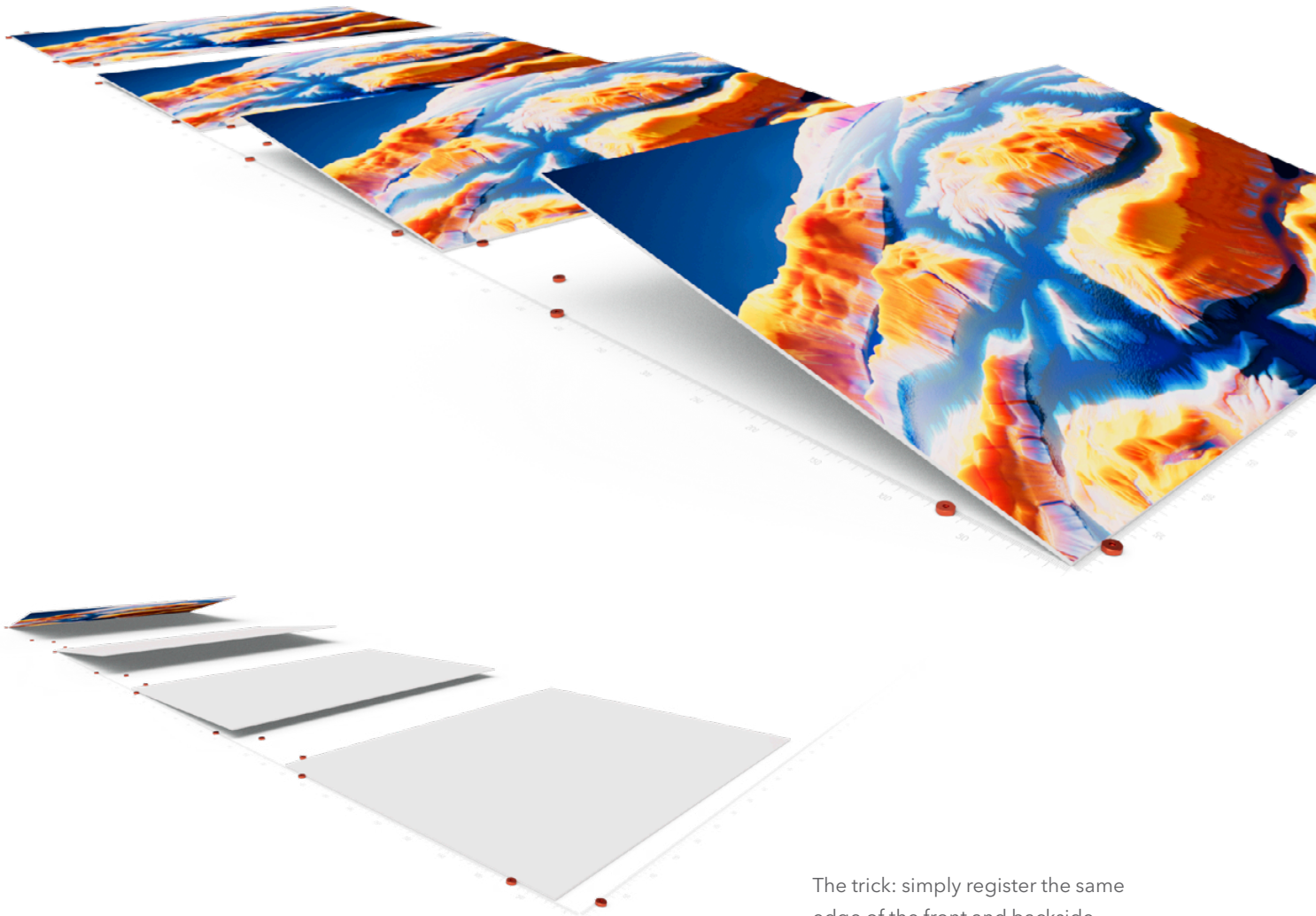
Relief printing

By ink layering, Kudu is able to produce textures and reliefs including Braille text. As the layers build up, print head clearance increases automatically to protect the heads and to achieve optimum results.

Flip – double-sided printing

You can produce double-sided prints with pinpoint registration in no time, even on inaccurately cut media. The swissQprint registration pins and the flip function give you perfect front-to-back registration, saving lots of time and waste.

The trick: simply register the same edge of the front and backside.

Technical specifications

Dimensions	Kudu
Flatbed, full bleed [1]	3240 × 2030 mm
Clearance	maximum 50 mm
Substrate weight	maximum 100 kg/m²
Roll width	maximum 3200 mm
Roll weight [2]	maximum 180 kg / dual roll 100 kg each
Roll diameter	maximum 360 mm

Equipment / Options	
Curing	UV LED
Roll to roll option	3200 mm × endless
Dual roll option	2 × 1524 mm × endless
Tandem function	standard
Print area, Tandem each zone [1]	3240 × 1015 mm
Tip Switch vacuum	standard

Colours	
Colour channels	maximum 10
Print heads	maximum 30
Print heads per channel	3
Light cyan, light magenta, light black	✓
White	✓
Varnish	✓
Primer	✓
Orange	✓
Neon yellow, neon pink	✓

Inks	
Integrated ink supply	CMYKcmk, orange 5 litre containers / white, varnish 5 or 1 litre containers / neon, primer 1 litre container
UV-curable inks	✓
Solvent-free (no VOCs)	✓
Greenguard Gold certification	✓
White feed and maintenance system	fully automated
Indoor and outdoor applications [3]	✓

[1] In most print modes
[2] Single rolls: optional carbon roll holder for heavy rolls >100 kg or narrow rolls >0.5 kg/cm roll width
[3] Neon: only for indoor applications

Resolution

Adressable resolution	up to 1350 dpi
Visual resolution	up to 2540 dpi

Dimensions and weight

Dimensions (L × W × H)	2.89 × 6.13 × 1.39 m
Weight	2600 kg
Safety standards	meets industry standards

Installation environment

Power supply	3 × 400 V, 3L+N+PE (50/60 Hz) 3 × 480 V, 3L+N+PE (60 Hz) 3 × 208 V, 3L+PE (50/60 Hz) excellent energy efficiency according to ISO 20690:2018
Temperature range	+20 °C to +30 °C
Relative humidity	40 % to 80 % non-condensing

SWISS MADE

First-class heritage
For precision, reliability and durability

Kudu contains 100 percent Swiss engineering and mechanical build quality.
The development department works right next door to where our production team
assembles each printer by hand. Out of more than 2000 individual parts, over
90 percent come from Switzerland. Because over 80 percent of our 200 suppliers
are Swiss companies, most of them also based in our region.

Single source
swissQprint delivers comprehensive and reliable solutions

Each element of a swissQprint system is carefully matched to the cleverly thought-out whole: from the mechanics to the control system and the output software. This is because our engineers at the headquarters work hand in hand. Furthermore, we operate an in-house ink laboratory that is the interface to our ink suppliers. This ensures that the inks keep pace with our developments and perform consistently.

At home worldwide
swissQprint is represented around the globe

Our subsidiaries and sales partners speak your language and support you in every way. Thanks to local warehouses you can rely on fast delivery of consumables and spare parts. All technicians undergo thorough training at swissQprint headquarters. You can therefore count on professional maintenance of your printer and spot-on assistance with both technical and application queries.

Visit the swissQprint showroom nearest to you.

● swissQprint headquarters/subsidiaries
● Official sales and service partners

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