# SIGNRACER
## PRECISION MEETS PERFORMANCE

# Hybrid and Roll to Roll Printers

**Flexible printing solutions for industrial requirements**

# Hybrid Printers

SIGNRACER Hybrid Printers offer a maximum flexibility to print roll and rigid materials on one machine. Designed to meet the dynamic demands of modern print environments, these printers are real working animals, merging the capability of roll-to-roll printing with the potential of flatbed printing. The SIGNRACER Hybrid series is using a premium conveyor belt to print on difficult roll material as well as on oversized long boards. For printing on boards, the Signracer hybrid can be delivered with additional tables in the front and rear. These extensions enable the hybrid to print on very large boards which would not fit on any flatbed printer.
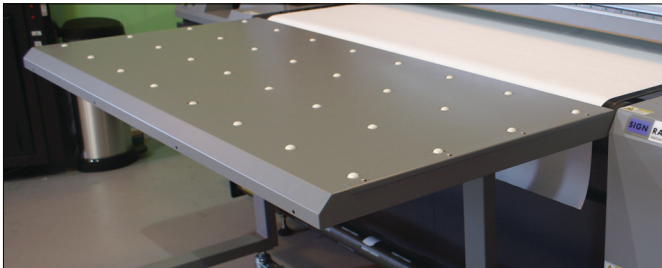


### Ricoh Gen. 6 Print Head Technology

High-precision and high quality print heads that deliver exceptional image quality, crucial for detailed graphics and consistent color accuracy.
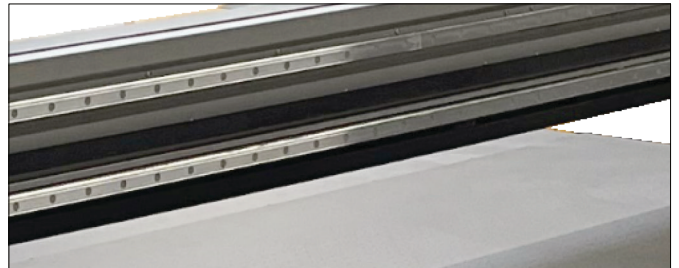


### UV LED Curing Technology

Efficient and rapid ink curing for durable prints, with energy-saving benefits and suitability for a wide range of materials.



### Dual-Functionality

Ability to easily switch between roll-to-roll and flatbed printing, offering versatility in media handling for diverse printing needs.



### Linear Motor Driven Carriage

Exclusive to 3200 top Signracer model, ensures high-speed printing with reduced vibrations and noise, enhancing print accuracy.



### Custom Ink Formulations

Tailored ink solutions designed for specific substrates and applications, ensuring optimal adhesion and print quality. Best multipurpose ink for all roll-to-roll and rigid media is SR-100 HD.
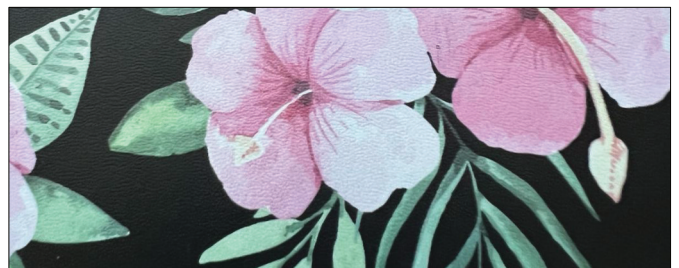


### Flexible Ink Solutions

The premium conveyor belt on hybrid printers, paired with PremiumFlex+ ink, provides a superior solution for printing on real leather, ideal for high-end fashion.

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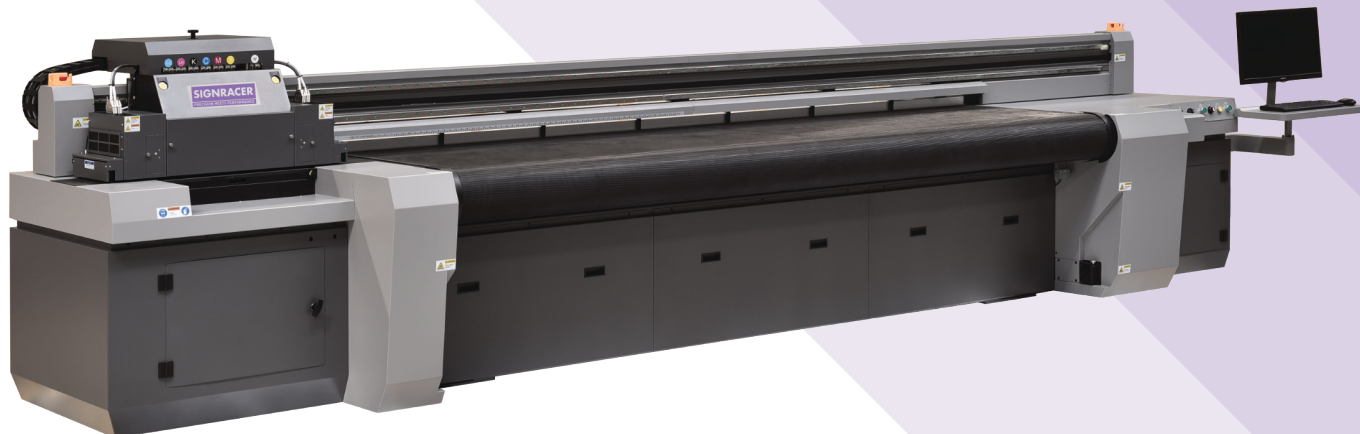
**GREENGUARD Gold Certification** sets strict standards for chemical emissions in products, ensuring healthier indoor air quality. Focused on protecting sensitive populations like children and the elderly, it demands lower emissions of volatile organic compounds (VOCs) than standard certifications. This certification is crucial for products used in environments such as schools and healthcare facilities, emphasizing both environmental sustainability and user health.



| Technical Key Features | SIGNRACER 1600 | SIGNRACER 2500 | SIGNRACER 3200 |
|---|---|---|---|
| **Printing Technology** | | Multi-drop technology | |
| **Print Heads** | | | |
| Ricoh Gen.6 | | 2–8 Print Heads | |
| Ricoh Gen.5 (optional) | | 2–8 Print Heads | |
| **Print Width** | 1600 mm | 2500 mm | 3200 mm |
| **Hybrid** | Conveyor vacuum belt with 3 zones and startbar for media positioning | Conveyor vacuum belt with 5 zones and startbar for media positioning | |
| **Carriage Type and Speed** | Belt | Belt | **Linear Motor** |
| Belt. Ricoh Gen. 6 | | 1.3 m/s | |
| Belt Ricoh Gen. 5 | | 0.8 m/s | |
| **Nozzle Quantity I Drop size** | | | |
| Ricoh Gen.6 | | 1280 nozzles \| 5 - 15 pl grayscale | |
| Ricoh Gen.5 | | 1280 nozzles \| 7-21 pl grayscale | |
| **Dimensions** | **(Length × Width x Height)** | **(Length × Width x Height)** | **(Length × Width x Height)** |
| **With PC arm** | 4310 × 870 x 1350 mm | 5500 × 1030 x 1350 mm | 6130 × 1420 x 1450 mm |
| **Without PC arm** | 3660 × 870 x 1350 mm | 4850 × 1030 x 1350 mm | 5480 × 1420 x 1450 mm |
| **Weight** | 900 kg | 1300 kg | 2460 kg |
| **Energy consumption** | 4 kW | 6 kW | 6 kW |
| **Media / Curing** | | | |
| **Maximum media width** | 1600 mm | 2500 mm | 3200 mm |
| **Media Type** | | Rigid and flexible (PVC Boards, Aludibond, PS, PP, Acrylat, PET-G, Glass) | |
| **Media Thickness** | | Maximum 50 mm | |
| **Media Curing System** | | LED UV curing with variable power levels | |
| **Single Row** | 90 mm / 14 Watt/cm² | 120 mm / 14 Watt/cm² | 90 mm / 14 Watt/cm² |
| **Double Row** | | 180 mm / 14 Watt/cm² | 180 mm / 14 Watt/cm² |
| **Triple Row** | | | 210 mm / 16 Watt/cm² |
| **Printing Speeds** | | | |
| **Ricoh Gen. 6** | **Single Row \| Double Row** | **Single Row \| Double Row** | **Single \| Double \| Triple Row** |
| **Draft** (4 pass, 600x900 dpi) | 26 m²/h / 43 m²/h | 40 m²/h / 60 m²/h | 41 m²/h / 69 m²/h / 97 m²/h |
| **Production** (6 pass, 600x900 dpi) | 20 m²/h / 37 m²/h | 30 m²/h / 46 m²/h | 30 m²/h / 51 m²/h / 70 m²/h |
| **Quality** (9 pass, 600x900 dpi) | 15 m²/h / 27 m²/h | 22 m²/h / 36 m²/h | 22 m²/h / 40 m²/h / 49 m²/h |
| **Ink Specifications** | | | |
| **Ricoh Gen. 6** | | 8 ml/m² | |
| **Ricoh Gen. 5** | | 10 ml/m² | |
| **Colour Configurations** | | CMYK + LC + LM<br>CMYK + White + Varnish<br>CMYK + LC + LM + White + Varnish | |
| **Signracer Certified Inks** | | SIGNRACER SR-100 HD, SR-200+, PREMIUMFLEX PLUS | |

# SIGNRACER 1800 RTR



## Practical Conveyor Belt

Specifically developed to handle difficult media this printer is using a conveyor belt and is therefore not a standard roll to roll design. It Incorporates a three-zone vacuum belt for precise and stable media handling, facilitating smooth transport of even heavy and thick media types.

## Ricoh Gen. 6 Print Head Technology

High-precision and high quality print heads that deliver exceptional image quality, crucial for detailed graphics and consistent color accuracy.

## Optimal Curing Technology

Advanced ink formulations are complemented by a matching UV LED system, guaranteeing effective curing and print longevity.

## Extended Color Configurations

The triple row carriage design offers over 20 color configurations, including light cyan, light magenta, white, and varnish, enabling vibrant and detailed print outputs. Whiteprint heads can be positioned in the front or rear to print first white and then color or white at the end over the color in one printing process.

## Continuous Print Production

Features a reliable winding system with tension control, ensuring uninterrupted, consistent printing, vital for high-demand scenarios.

## High-Quality OEM Inks

Utilizes specially formulated OEM inks for superior performance and resilience, essential for enduring, high-quality prints. Including a low cost ink for high consumers SR-100-T





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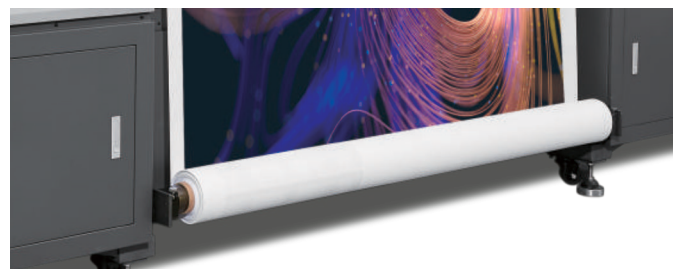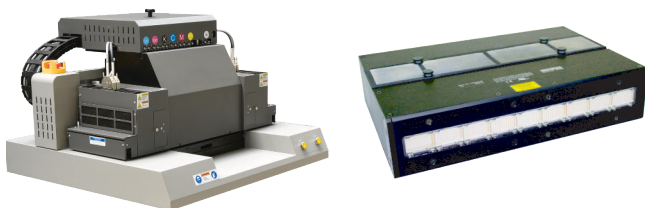
# SIGNRACER 3200 RTR



## Super Wide Format Printing up to 3.2m

This feature allows the production of large-scale prints such as banners and wall graphics. Its wide format capability is ideal for creating impactful visual displays in various industries.

## High Print Speed

With a speed of up to 87 square meters per hour, the printer excels in fast-paced environments. This high-speed printing is crucial for businesses with tight deadlines and high-volume demands.

## High-Density Print Mode for Backlit

Designed for backlit displays, this mode ensures prints are vivid and bright when illuminated. It's essential for producing eye-catching illuminated signage with enhanced color depth.

## Vacuum & Mesh Printing Kit

The adjustable suction system ensures stable media handling, crucial for consistent print quality. The included mesh printing kit expands the printer's capabilities, especially for outdoor advertising applications.

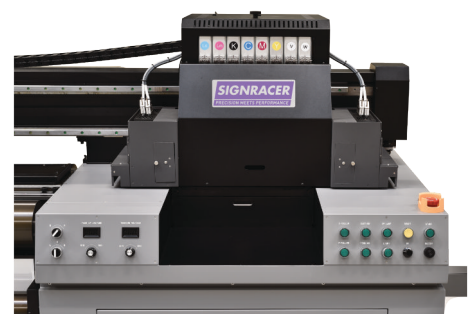## Single Row Kyocera KJ4A Print Heads

Equipped with Kyocera KJ4A print heads, the printer delivers high-quality, durable prints. These heads ensure precision and consistency, ideal for detailed and high-resolution graphics.

## SIGNRACER SR-100 T Inks

These specially formulated RTR inks enhance print vibrancy and durability. They provide versatility across various substrates, ensuring top-notch print quality for diverse applications.

## Max. Material Thickness up to 2mm

The printer's ability to handle thick materials and heavy rolls demonstrates its robustness and adaptability, accommodating a wide range of media types for various printing needs.





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# SIGNRACER 3200 TURBO





## Double Row PH Kyocera

Equipped with Kyocera KJ4A print heads in a double row configuration, the SIGNRACER 3200 RTR TURBO is a top printing machine in the RTR range and ensures flawless printing with remarkable detail and color richness.

## Air Cooled LED System

Largest 270 mm high performance LED system with 16 Watt/cm2 dries the ink properly even in the highest speed modes and on difficult materials. The LED system ensures excellent adhesion and durability across various materials. Its energy-efficient design minimizes heat exposure, making it ideal for heat-sensitive media.





## Superior Performance

Experience groundbreaking speeds with a carriage velocity of 1.7 m/s, only achievable by the advanced linear motor technology. The accuracy of the linear motor enabes rapid production without compromising on quality.
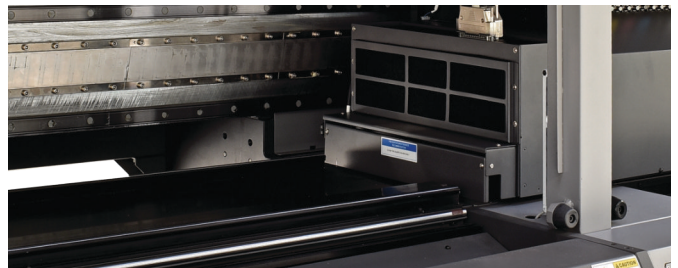
## Exceptional Printing Efficiency

Achieve impressive printing speeds of up to 156 m²/h, facilitated by the innovative linear motor technology, tailored for high-volume production.



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## Versatile Material Support

Broaden your printing capabilities with support for a diverse range of printing materials, opening doors to new possibilities and applications.

## Premium Design

The new safety cover is not just a protective feature; it adds a touch of elegance to the printer, embodying a premium design that complements any industrial setting.

## Robust Double Roller Material Transport

A double roller unit robustly supports material transport, ensuring smooth and precise media handling for uninterrupted printing.

## Enhanced Performance

The SIGNRACER 3200 RTR TURBO exhibits exceptional performance with less wrinkling of the substrates, maintaining print quality and consistency.

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| Specifications | SIGNRACER 1800 RTR | SIGNRACER 3200 RTR | SIGNRACER 3200 TURBO |
|---|---|---|---|
| **Print Heads** | Ricoh Gen.6 | Kyocera KJ4A (2-4) | Kyocera KJ4A (4-10) |
| **Nozzle Quantity** | 1280 | 2656 | 2656 |
| **Physical Resolution** | 600 dpi | 2 x 300 dpi | 2 x 300 dpi |
| **Drop Size** | Variable 5 - 15 pl | Variable 4 - 6 -10pl | Variable 4 - 6 - 10pl |
| **Max. Frequency** | 40 kHz | 30 KHz | 30 KHz |
| **Print Head Width** | 54.1 mm | 112.35 mm | 112.35 mm |
| **Color Configurations** | CMYK + WH<br>CMYKLcLm + WH<br>CMYKLcLm + WH + VAR | 4 PH - DS_CMYK<br>2 PH - CMYK | 4 PH - DS_CMYK<br>5 PH - W + DS_CMYK<br>8 PH - DA_YMCKKCMY_<br>10 PH - DA_YMCKWWKCMY |
| **LED UV** | | | |
| **Media Curing System** | LED UV curing with variable power levels | | |
| **Single Row LED** | - | 180 mm / 14 Watt/cm² | |
| **Double Row LED** | 180 mm / 14 Watt/cm² | - | 270 mm / 16 Watt/cm² |
| **Triple Row<br>Other Modes LED** | 180 mm / 14 Watt/cm² | - | - |
| **Media Specification** | | | |
| **Max. Media \| Max. Print Width** | 1800 mm \| 1800 mm | 3200 mm \| 3200 mm | 3200 mm \| 3200 mm |
| **Media Type** | Roll Materials | | |
| **Max. Media Weight** | 150 kg rolls | | |
| **Media Thickness** | 50 mm | Maximum 2 mm | |
| **Roll printing** | Single roll printing | Single roll printing | One roll or two rolls printing optional |
| **Optional** | - | Mesh kit | |
| **Printing Speed** | **Double Row / Triple Row** | **Single Row** | **Double Row** |
| **Carriage type** | Belt | Belt | **Linear Motor** |
| **Carriage speed** | 1.3 m/s | 1.3 m/s | 1.7 m/s |
| **Draft** | 51 m²/h / 65 m²/h | 87 m²/h | 156 m²/h |
| **Production** | 42 m²/h / 56 m²/h | 63 m²/h | 115 m²/h |
| **Quality** | 31 m²/h / 41 m²/h | 49 m²/h | 82 m²/h |
| **Physical Properties** | **(Length x Width x Height)** | | |
| **Without PC Arm** | 3850 x 960 x 1340 mm | 5760 x 1310 x 1710 mm | 6030 x 1850 x 1905 mm |
| **With PC Arm** | 4550 x 960 x 1340 mm | 6460 x 1310 x 1710 mm | Separate operation tower |
| **Weight** | 1200 kg | 1800 kg | 3500 kg |
| **Energy Consumption** | 4 kW | 4 kW | 9 kW |
| **Ink Specification** | | | |
| **Certified Inks** | SR-100 HD, SR-100 T | | |
| **Ink Consumption** | 8 ml/m² | | |

The **SIGNRACER SR-100 HD** features **Greenguard Gold Certification** with excellent adhesion and flexibility for both roll and rigid materials. Its high-density colors and robust resistance to solvents and scratches make it ideal for diverse printing tasks.

**The SIGNRACER SR-100 T**, tailored for high volume Roll-to-Roll printing, uses specialized LED-compatible ink available in 5 litre CMYK bottles. It offers multipurpose applications, maintaining high color density and durability against solvents and scratches.

**SIGNRACER PREMIUMFLEX PLUS**, designed for printing on leather and similar flexible materials, ensures strong adhesion and color richness. Its ink provides outstanding long-term flexibility and stretchability, suitable for demanding material applications.