

**SIGNRACER**

PRECISION MEETS PERFORMANCE

EXTENDED-CLEARANCE INDUSTRIAL FLATBED UV LED PRINTER

# SIGNRACER 2512 HB25

**Industrial flatbed with 250 mm clearance  
for thick substrates and assembled  
products on a 2500 x 1250 mm bed.**



🌀 250 mm clearance for thick substrates and assembled parts.

⚡ Up to 63 m<sup>2</sup>/h draft throughput in triple-row configuration.

🌀 2500 x 1250 mm honeycomb vacuum bed with zoned suction.

EXTENDED CLEARANCE FOR THICK MEDIA

The SIGNRACER 2512 HB25 combines a 2500 x 1250 mm industrial flatbed with clearance for qualified media and parts up to 250 mm high. It supports rigid-substrate and semi-assembled-part workflows after fixture, clearance, and application validation.

The HB25 combines Ricoh Gen. 6 printheads, grayscale control, and a linear-motor carriage with clearance for media up to 250 mm. Its zoned honeycomb vacuum bed supports flat-media positioning; approve registration with the actual part and fixture.



INDUSTRIAL FIT SNAPSHOT

250 mm Media Height

Extended clearance handles thick substrates and semi-assembled parts without the cost of a full high-bridge system.

1 µm Encoder Resolution

Linear encoder feedback provides 1-micron measurement resolution; approve registration at the intended bridge height and fixture setup.

Up to 63 m²/h Draft Speed

The triple-row configuration reaches up to 63 m²/h in draft mode. Approve quality and usable speed on the intended thick substrate or part.

BUILT FOR THICK MEDIA AND ASSEMBLED PARTS



Extended 250 mm Clearance

250 mm media clearance bridges the gap between standard 100 mm flatbed and full 500 mm high-bridge, handling thick substrates and semi-assembled parts.



Archived GREENGUARD Gold Records

Archived certificate records for SR-200+ and SR-100 HD cover periods ending 25 January 2025. Confirm current certification, the exact ink family, and project scope before specification.



Triple-Row Curing Configuration

Up to 8 Ricoh Gen. 6 heads with triple-row curing at 16 W/cm². Confirm cure, heat response, adhesion, finish, and usable speed on the actual object profile.

KEY CAPABILITIES

250 mm Media Clearance

Print on substrates up to 250 mm thick — panels, assembled parts, and thick boards without a full high-bridge setup.

Adjustable Print Distance

Adjustable head height supports setup for different substrate thicknesses. Approve clearance, throw distance, detail, cure, and registration on the actual part.

Up to 63 m²/h Draft Throughput

The triple-row configuration reaches up to 63 m²/h in draft mode. Approve quality and usable speed on the intended thick substrate or part.

CORE TECHNOLOGY BEHIND 2512 HB25 PERFORMANCE



Linear Motor + 1-Micron Encoder

Direct electromagnetic carriage motion at 1.2 m/s replaces belt dependency for demanding large-format detail work.



Ricoh Gen. 6 Print Engine

Industrial-grade heads with 5–15 pl grayscale, scalable from 2 to 8 heads for throughput and quality flexibility.



Triple-Row UV LED Curing

IST INTECH system with single, double, or triple row options up to 16 W/cm² for cure tuning across substrates.



### SR-100 HD for Multi-Purpose Production

Published SR-100 HD data reports solvent and scratch resistance for mixed rigid and roll-media work.



### SR-200+ for High-Adhesion Industrial Parts

Published SR-200+ data positions the ink for adhesion-focused industrial work with Orange and Violet gamut options.



### PREMIUMFLEX+ for Flexible Materials

Published PREMIUMFLEX+ data reports flexibility for leather-like and soft substrates, including Bally Test durability above 50,000 cycles.

## HIGH-FIT APPLICATIONS FOR SIGNRACER 2512 HB25



### Flat Footwear Upper Panels

Print flat shoe-upper panels, synthetic leather pieces, and pre-assembly footwear components using fixtures within the 250 mm clearance.



### Thermoforming Process Samples

Print flat plastic sheets before forming to evaluate artwork distortion, color shift, adhesion, cracking, and process limits.



### Equipment Faceplates and ID Plates

Print qualified flat faceplates, instrument ID plates, and control-panel overlays within the machine clearance.



### Flat Industrial Housing Panels

Use the 250 mm clearance for fixtures holding thick flat housing panels, side plates, and enclosure covers before assembly.



### Electronic Device Faceplates

Print branding and functional markings on qualified flat plastic faceplates, control overlays, and device-panel sheets.



### Industrial Tool-Control Plates

Print identification on qualified flat tool-control plates, jig reference plates, and production ID panels.

# SIGNRACER 2512 HB25

## Print Engine

**PRINT TECHNOLOGY**  
UV-Cured Industrial Inkjet

**PRINTHEADS / COUNT**  
Ricoh Gen. 6, 2 to 8

**NOZZLES / DROP SIZE**  
40 kHz: 1280 nozzles | 5-15 pl grayscale

**PRINT RESOLUTION**  
635 x 900 dpi

**CARRIAGE DRIVE / SPEED**  
Linear Motor, up to 1.2 m/s

## Media & Bed System

**PRINT AREA**  
2500 x 1250 mm

**FLATBED TYPE**  
Honeycomb 4 zones vacuum table with registration pins

**MAX MEDIA WIDTH / PRINT WIDTH**  
2540 mm / 2500 mm

**MAX MEDIA THICKNESS**  
Maximum 250 mm (extended clearance)

**SUPPORTED MEDIA**  
PVC, aluminium composite, acrylic, wood, MDF, glass, PET-G, composite panels, leather, corrugated board, mesh, vinyl, foam board; validate production media before approval

## UV Curing System

**CURING TECHNOLOGY**  
LED UV curing with variable power levels

**CURING WIDTH / POWER**  
Single: 90 mm / 14 W/cm²  
Double: 180 mm / 14 W/cm²  
Triple: 210 mm / 16 W/cm²

## Ink Solution

**INK CONFIGURATION 1**  
CMYK + White

**INK CONFIGURATION 2**  
CMYK + LC + LM + LK + White

**INK CONFIGURATION 3**  
CMYK + Orange + Violet + White + Varnish

**INK CONSUMPTION**  
8 ml/m²

## Electrical & Physical

**POWER CONSUMPTION**  
6 kW

**DIMENSIONS (L X W X H)**  
4930 x 2190 x 1500 mm

**WEIGHT**  
1450 kg

**SHIPPING CRATE (L x W x H)**  
5250 x 2300 x 1850 mm

**SHIPPING WEIGHT**  
1780 kg (gross) / 330 kg (crate)

## Software & Documentation

**RIP SOFTWARE**  
Caldera, Ergosoft

**CONFORMITY MARKING**  
CE marking

**CONSUMABLES (NOT COVERED)**  
Printheads, inks, filters and other wear parts

### PRINT SPEED BY CONFIGURATION

| CONFIGURATION | 4-PASS | 6-PASS | 9-PASS |
|---------------|--------|--------|--------|
| SINGLE ROW    | 27     | 22     | 15     |
| DOUBLE ROW    | 47     | 39     | 28     |
| TRIPLE ROW    | 63     | 53     | 38     |

### Validate the 2512 HB25 on Your Parts

Share your materials, artwork, and quality targets for a focused test-print and rollout recommendation from SIGNRACER.



Scan for the live product page

SIGNRACER GmbH  
info@signracer.ch  
+41 41 792 01 57  
www.signracer.ch

