

SIGNRACER

PRECISION MEETS PERFORMANCE

INDUSTRIAL FLATBED UV LED PRINTER

SIGNRACER 1610

Compact industrial flatbed built for precision, repeatability, and fast validation cycles.



⚙ Linear motor carriage with encoder feedback at 1-micron measurement resolution.

⚡ Up to 38 m²/h draft throughput in double-row configuration.

📏 1600 x 1000 mm flatbed with support for media up to 100 mm height.

PRECISION MEETS PRODUCTION

The SIGNRACER 1610 combines a 1600 x 1000 mm flatbed, double-row printhead configuration, Ricoh Gen. 6 heads, and linear-motor carriage. Approve output on each intended rigid sheet, flexible part, or fixture setup.

The 1610 is intended for flatbed production where floor space is limited and jobs require controlled output on qualified boards, sheets, and rigid or flexible parts.



INDUSTRIAL FIT SNAPSHOT

1 µm Encoder Resolution

Encoder feedback with 1-micron measurement resolution supports carriage positioning; approve registration in the intended print mode and fixture setup.

Up to 38 m²/h Draft Speed

Double-row draft mode is positioned for teams balancing short lead times with industrial output consistency.

100 mm Media Height

Print on qualified rigid parts and components up to 100 mm high; approve the actual part, fixture, clearance, and registration setup.

BUILT FOR INDUSTRIAL PRODUCTION



Steel Chassis

The rigid frame supports the flatbed platform and controlled carriage movement during production.



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.



Compact Double-Row Printhead

The double-row configuration provides up to 38 m²/h draft throughput in a compact flatbed platform.

KEY CAPABILITIES

Positioning Feedback

Linear motor drive with 1-micron encoder measurement resolution supports controlled carriage positioning. Approve registration on the actual fixture and production mode.

Fast Sample Validation

On-site proofing and rapid sample cycles shorten the path from design approval to full production.

Configurable Printhead Count

The platform is specified with 2 to 8 Ricoh Gen. 6 printheads. Select the configuration against the required ink channels, print modes, and throughput.

CORE TECHNOLOGY STACK BEHIND 1610 PERFORMANCE



Linear Motor + 1-Micron Encoder

Direct electromagnetic carriage motion replaces belt dependency and improves positional control for demanding detail work.



Ricoh Gen. 6 Print Engine

Ricoh Gen. 6 heads provide 5-15 pl grayscale drops at up to 40 kHz. Approve tones, edges, colour, and detail in the intended print mode.



Air-Cooled UV LED Curing

The IST INTECH system offers adjustable power up to 14 W/cm² for curing trials. Confirm cure, adhesion, heat response, finish, and required resistance at the intended speed and ink load.



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 1610



Watch Dial and Micro-Detail Components

Develop watch-dial and small-component workflows using fine artwork, controlled fixturing, and the specified grayscale print engine.



Braille and Tactile Signage

Build and measure tactile samples on the intended sign material.



Digital Masking and Surface Processing

Print a UV-curable removable mask directly on qualified metal surfaces for tested brushing or sandblasting workflows.



Industrial Component Marking

Print graphics, serial numbers, and codes on small housings, identification plates, and machine tags.



Acrylic Point-of-Sale Displays

High-resolution printing on acrylic sheets and retail display parts for compact POS programs.



Wayfinding and Directional Signage

Print room signs, directional panels, and identification plates on qualified rigid substrates.

SIGNRACER 1610

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
1600 x 1000 mm

FLATBED TYPE
Honeycomb 2 zones vacuum table with registration pins

MAX MEDIA WIDTH / PRINT WIDTH
1640 mm / 1600 mm

MAX MEDIA THICKNESS
Maximum 100 mm

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

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
4 kW

DIMENSIONS (L X W X H)
3100 x 1700 x 1300 mm (w/o PC arm)

WEIGHT
760 kg

SHIPPING CRATE (L x W x H)
3300 x 1900 x 1600 mm

SHIPPING WEIGHT
1060 kg (gross) / 300 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	22	18	14
DOUBLE ROW	38	31	23

Validate the 1610 on Your Real Parts

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



Scan for the live product page

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