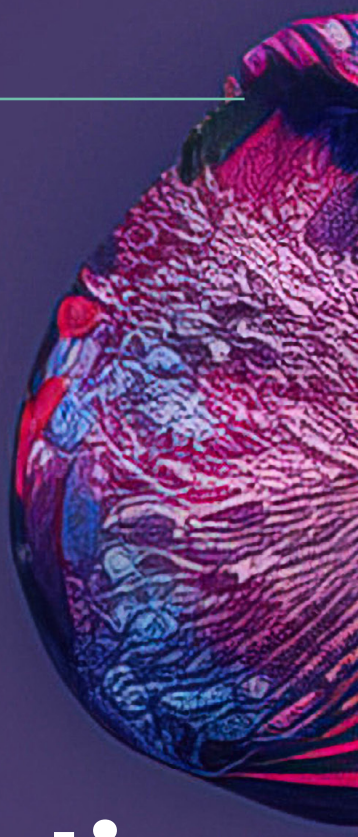
FUJIFILM
Value from Innovation

# Acuity Ultra Range

**PRODUCT BROCHURE**


World-class wide format printing solutions



# Superb dot reproduction and bright vivid colours

**Colour is the most important aspect of an ink; prints with rich colour have more impact and are more saleable. What's more, a printer needs a wide colour gamut for faithful reproduction of images and to match spot colours.**

Our Uvijet inks feature Fujifilm's proprietary Micro-V dispersion technology. This enables high concentrations of colour pigment to be effectively dispersed and stabilised, resulting in brilliant results in the final printed product.

### Reassuringly consistent results

To achieve high quality images and beautiful, vibrant colours time and time again, not only must the inks be of an exceptionally high standard, the formulations must be ultra-consistent. Our Uvijet inks are manufactured to incredibly exacting standards. Quality assurance at our award-winning ink manufacturing facility is second-to-none; we only use raw materials that are consistently of the highest grade, which helps to ensure that every batch of ink we create is exactly the same as the last.

### Micro-V dispersion technology

Micro-V is a unique Fujifilm technology that breaks down pigment particles and ensures they are held in stable dispersion in the ink. It enables high concentrations of colour pigment to be effectively dispersed and stabilised, resulting in an ink with high colour intensity that resists both agglomeration and gravitational settling – so the ink has high colour strength as well as being stable and reliable.

A proprietary Fujifilm dispersion technology is used to coat the individual pigment particles that are separated during the dispersion process. This coating gives the particles a tendency to repel each other and therefore prevents pigment agglomeration. A molecular bonding agent is used to provide a link between this dispersion coating and the ink binder, or 'vehicle', in order to stabilise the pigment particle in the fluid and prevent gravitational settlement.

After Micro-V dispersion, pigment particles have an average particle size of less than 200 nanometres – 0.2 microns. They start roughly the size of a grain of salt and are ground down in size to smaller than a human cell.

**Fujifilm pioneered UV inkjet printing, and has the highest number of patents for UV inkjet ink**

# Acuity Ultra R2

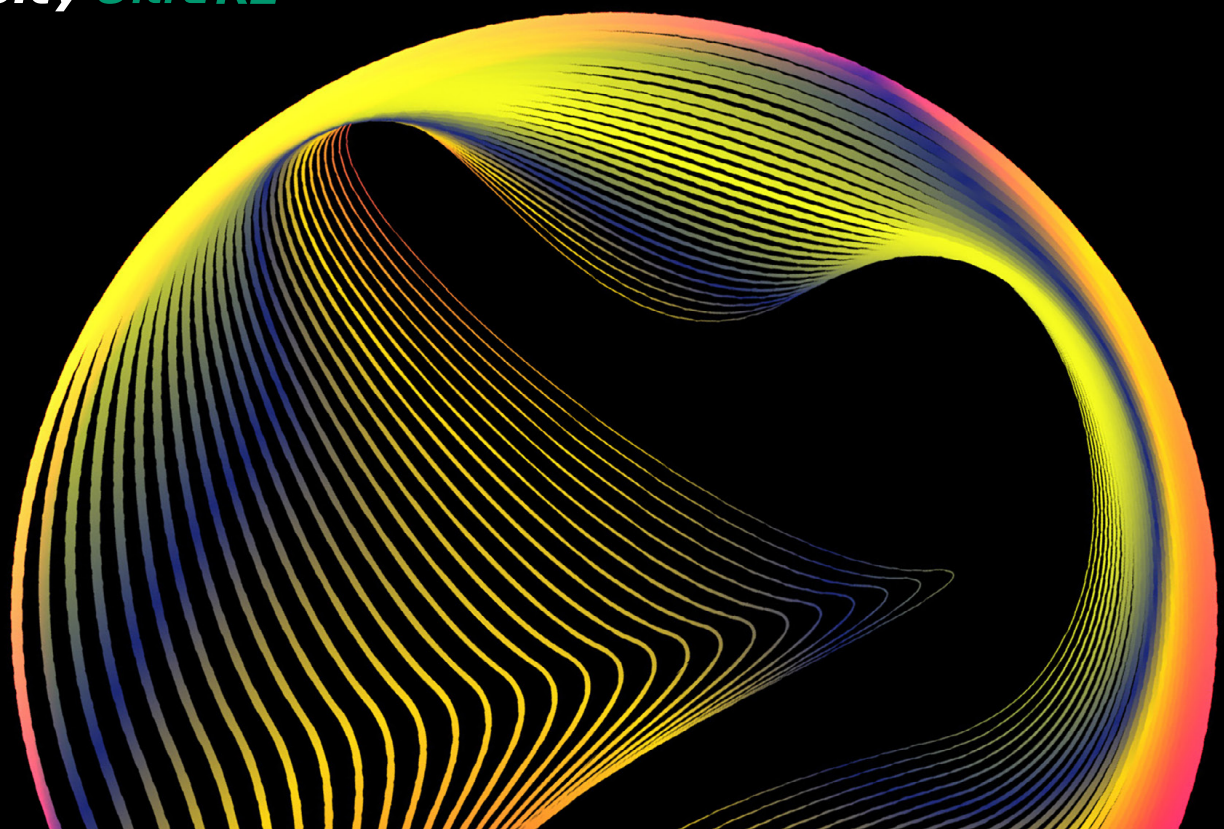
The Acuity Ultra R2 is a high quality, high productivity superwide platform, available in Mercury UV and LED UV curing configurations. Engineered with the operator in mind, it is designed with specialist inks to support the printing of exceptional near-photographic interior graphics and the high speed printing of banners and PVC signage.

With the Acuity Ultra R2, you get the excellent high quality, productivity and reliability our Acuity range is known for, on a massive industrial scale. High performance printheads with a 3.5 picolitre drop size ensure consistent high quality print, and are combined with excellent build quality using industrial-quality components.

The robust chassis of the Acuity Ultra R2 is a substantial construction, contributing to the 7.7 t and 4.7 t weights of each model. In addition, the linear, vibration free carriage drive, supported by a reliable feeding system, ensures accurate drop placement from first to last drop.

**The Acuity Ultra R2 is a modular system with a scalable architecture, meaning it can grow and change as your business evolves.**

Acuity Ultra R2



# Ultra-high quality output


## Why Acuity Ultra R2?

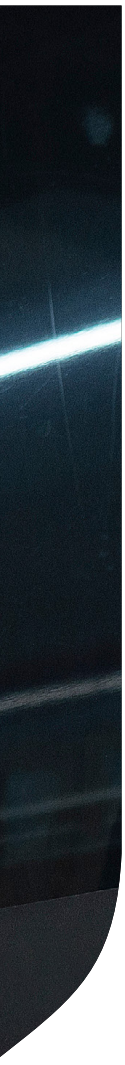
Ultra-low ink consumption for low cost-in-use and exceptional ROI

Capable of producing ultra-high quality print at the highest production speeds

Incorporates advanced operator features for ultra reliable, profitable printing


**Our investment in an Acuity Ultra R2 has enabled us to prioritise personalisation and efficiency - while delivering on versatility and value - all while achieving growth."**

**Miguel Ángel Gómez Cano**
Managing Director
Oedim Spain



# Delivering phenomenal return on investment

## The perfect ratio for profitability

With the ideal ratio of quality, speed and cost-in-use, the Acuity Ultra R2 gives you the power to profit from a huge range of indoor and outdoor applications, offer better quality and produce higher speeds. Drive your business forward with an outstanding superwide machine from a world leader in industrial inkjet technology.

## Make an impact in the high-end indoor display market

The Acuity Ultra R2 is not only ideal for out-of-home applications such as single billboards and signage, it's also perfect for high-end indoor displays where close viewing requires images to be exceptionally clear and vibrant. With quality comparable to leading water-based inkjet systems, investing in an Acuity Ultra R2 can propel your business into the luxury brand market.

## Long printhead life minimises costs of consumables

With an impressively long life, you won't have to worry about replacing printheads as often. Combined with low ink consumption, the long printhead life reduces the hassle and costs associated with replacing consumables.

## Versatility on a massive scale

With its massive format size, 2- or 3-up multi-roll potential, and ability to print on a broad range of materials, the Acuity Ultra R2 gives you the ability to profitably create exhibition graphics, POS displays, high-value graphic art, backlit displays, outdoor displays, outdoor signage and more. And now with the option of our LED UV versions, you can offer even more value and versatility to your workflow, based on customer demand.

## Fully equipped to enhance productivity

The Acuity Ultra R2 is equipped with advanced features for flexible and productive printing, including: a unique chilled vacuum table to enable printing of thin heat-sensitive substrates; an on-board backlighting feature to enable image quality to be checked during printing; and an automatic nozzle spitting system to maintain consistent print quality.

## Scalable architecture

All Acuity Ultra R2 systems have an ink channel upgrade path. You can start with a 5004 LED UV printer, then add light colours at a later date or white too if needed. The scalable architecture allows you to maximise your investment depending on the direction of your business for maximum flexibility.

## Key features

- Native 3.5 picolitre, 3 level greyscale printhead
- Linear-driven printhead carriage
- Water-cooled vacuum table
- Accurate and reliable media transport system
- Double sided print function supports printing on both sides of the media in perfect registration
- 3.2 m and 5 m options
- Mercury UV and LED UV curing options available
- Fujifilm Uvijet GS and AU inks
- Versatile, ultra-high quality 6 channel with white option
- Highly productive dual CMYK 8 channel model
- Output speed over 600 m²/hr
- 0.1 mm to 2.0 mm media thickness
- Multi-roll printing
- Prints on heat-sensitive materials
- Intuitive GUI

# Acuity Ultra R2 at a glance

**Easy to use, saving time and money**

With features to speed up job set-up times, enable the status of the print to easily be reviewed, through to the day-to-day maintenance of the machine, the ease of use of the Acuity Ultra R2 is a key contributor to improving your overall print ROI.


**Media crash detectors to prevent printhead damage**

The carriage is equipped with media crash detectors on either side. These react to obstructions on the vacuum table to stop the carriage and prevent damage to the printheads.

**Multi-roll capability maximises productivity for smaller jobs**

With a throughput of over 600 m² per hour, the machine has the potential to produce huge volumes of work when printing on three rolls simultaneously, as well as printing superwide format graphics up to five metres in width.

**Water-cooled vacuum table**

A unique chilled vacuum table maintains the substrate temperature while printing and allows the use of thin heat-sensitive substrates, reducing media shrinkage and wrinkling.


### Ink spitting to minimise machine downtime

The Acuity Ultra R2 is fitted with a spit function designed to reduce machine downtime. This maintains the print quality and helps to increase the overall consistency of the printed results.

### Auto media thickness and position measurement

The Acuity Ultra R2 is equipped with a media detector mounted on the carriage. This is used to determine the position and thickness of the media.

### Mechanical substrate detector

The Acuity Ultra R2 is equipped with media sensors positioned under the rear media tension rollers, with 3 sensors on the Acuity Ultra R2 5000, and 2 on the Acuity Ultra R2 3200.

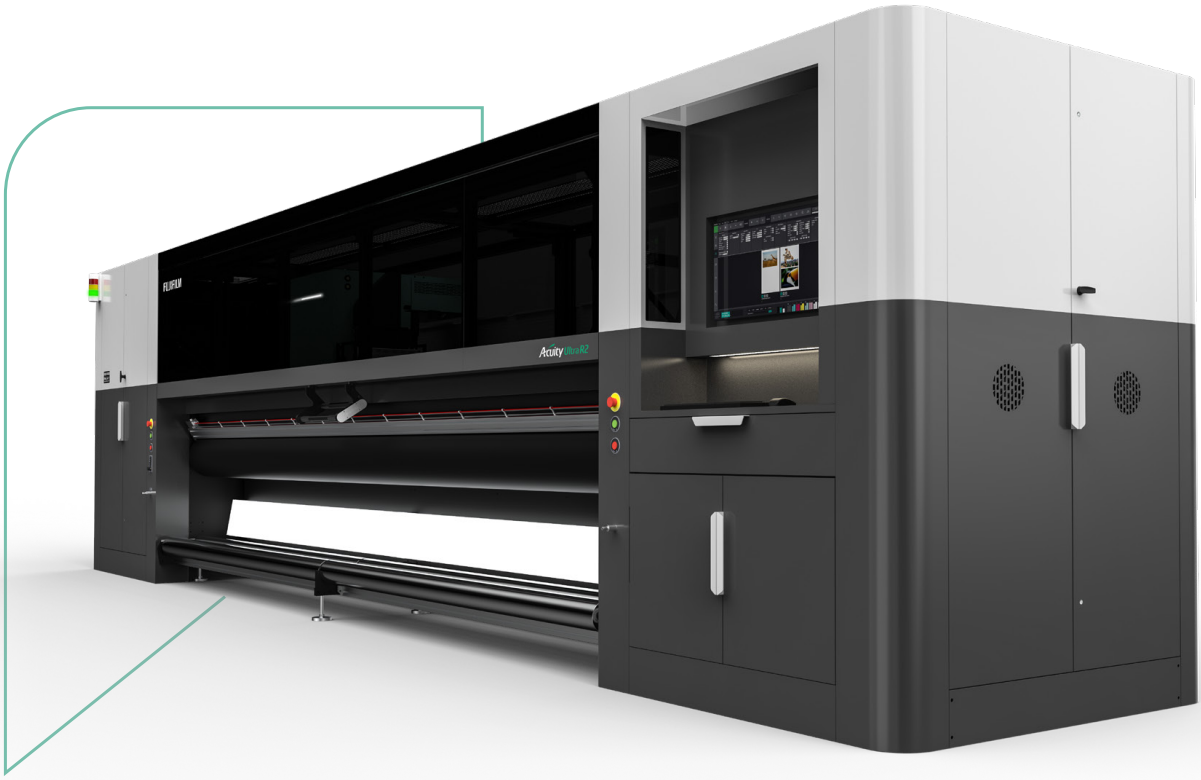
# Acuity Ultra R2

### Industrial UV and LED curing systems

The Acuity Ultra R2 is available in 3.2 or 5m formats, using LED UV lamps for the 6 colour and 6 colour plus white options, or Mercury UV lamps for the high speed double CMYK configuration, ensuring block free production. By offering both solutions, printers can choose the most appropriate technology to support their business needs.

### High-performance Uvijet GS and AU inks

New, high colour density inks deliver superb vibrancy and a wide colour gamut. Excellent inter-coat laydown produces solid backlit colours and prints. The inks also do not exhibit cracking when folded due to the low ink build. The new high colour density inks are delivered using 3.5 pL printheads, resulting in a very low film thickness and ultra-low ink consumption, resulting in very low cost-in-use and higher profit per print.




# Technical specifications

| Acuity Ultra R2 | 3200 series | 3200 series | 5000 series | 5000 series |
|---|---|---|---|---|
| **Curing system** | LED UV | Mercury UV | LED UV | Mercury UV |
| **Model** | 3204: CMYK<br>3206: CMYK LcLm<br>3208W: CMYK LcLmWW | 3204: CMYK<br>3244HS: CMYK CMYK | 5004: CMYK<br>5006: CMYK LcLm<br>5008W: CMYK LcLmWW | 5004: CMYK<br>5044HS: CMYK CMYK |
| **Printhead drop volume** | Greyscale, 3.5 pl – 14 pl | | | |
| **Printing technology** | Piezoelectric drop-on-demand inkjet | | | |
| **Resolution** | Up to 1200 x 1200 dpi | | | |
| **Inks** | Uvijet AU series | Uvijet GS series | Uvijet AU series | Uvijet GS series |
| **Maximum throughput** | 400 m²/hr | | 667 m²/hr | |
| **Maximum media width** | 3.40 m | | 5.13 m | |
| **Maximum media thickness** | 2.0 mm | | | |
| **Minimum media thickness** | 0.1 mm | | | |
| **Maximum print image width** | 3.20 m | | 5.00 m | |
| **Media loading capabilities** | Large rolls: 400 kg x 400 mm | | Large rolls: 600 kg x 400 mm | |
| | Multi-rolls: 2 x 200 kg x 340 mm | | Multi-rolls: 3 x 200 kg x 340 mm | |
| **Hardware interface** | Ethernet TCP/IP, 1000 base-T | | | |
| **Power requirements** | 3 phase, 400V AC, 50 Hz, 30A | | | |
| **Compressed air** | Pressure (minimum): 8 kg/cm² (7.85 bar / 114 psi) | | | |
| | Flow rate (minimum): 1.2 m³/min (1200 l/min / 42.26 cfm) | | | |
| **Environmental conditions** | Temperature: 18˚C – 28˚C | | | |
| | Humidity: 40% – 80% RH (non-condensing) | | | |
| | Atmospheric dust: ≤0.15 mg/m³ | | | |
| **Dimensions (L x W x H) (excluding workstation)** | 6.81 m x 1.81 m x 2.04 m | | 8.5 m x 1.88 m x 2.21 m | |
| **Machine weight** | 4750 kg | | 7740 kg | |