



*Acuity*  
**Ultra  
R2**

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Product Guide



# Why Fujifilm?

Fujifilm believes that our collective future of print is based on dynamic collaboration. Therefore, you deserve a partner who understands where you have been, where you are currently, and where you want to go. Fujifilm's business is anchored to the traditions of our industry and the historical relationship we have with the print community. When we combine our history of innovation and our commitment to product development with our enthusiasm for our customers' success, together we can achieve any vision you have for your company.

The letters 'FUJIFILM' are rendered in a large, bold, 3D font with a grainy, metallic texture. The letters are set against a dark background, creating a strong visual impact. The 'F' is on the left, followed by 'U', 'J', 'I', 'F', 'I', 'L', and 'M' on the right.

### History of Innovation

The Fujifilm difference is supported by 4 pillars of strength. Our long history and countless milestone achievements are proof of both our longevity and dedication to this amazing industry. Fujifilm grew up in this business and there is no substitute for the collective experiences we have had and the depth to our understanding of the business. Our portfolio truly spans the entire print industry and is purely the result of the other pillars. Our history of innovation drives a culture of progress.

### Global Strength

The culture within Fujifilm is rooted in respect and innovation. The care with which we engage clients and investment in solutions has been critical to our ability to create advances in technology and infrastructure. Being devoted to traditional business processes allows us to align with traditional hierarchy while also being innovative and disruptive. Our approach is born from mutual respect for others and a willingness to drive change.

### Local Partner

Fujifilm Graphic Communication Division (GCD) is full of passionate team members. While globally, Fujifilm invests in Research & Development at a frenetic pace (\$7 million dollars per day), locally, Graphics Communication Division (GCD) embraces a culture of relentless service & support. When it comes to innovation, we develop all our technology in house including printheads, inks, inkjet technology and image processing systems. And there is no better place to witness this than our remarkable Innovation Lab. Located in our North American Headquarters in Hanover Park, Illinois, just 30 minutes west of Chicago, the Fujifilm Graphics Innovation Hub (GIH) is here to showcase for you the newest innovations from Fujifilm's Graphic Communication Division. The GIH demonstrators have industry experience and are experts in the operation and use of our print equipment.

### Broad Portfolio

The Fujifilm portfolio is broad and is the result of our history of innovation, our corporate reach, and our local connections. The breadth of our portfolio aims to fulfill every sector of the print market and continues to grow as our customer's needs grow. We aim to support the most progressive leaders, the maniacally detailed operators, the environmentally conscious, and the creatives that realize the impact that print can have on brand equity.



# Better By Design



reddot winner 2021



The Acuity Prime, Acuity Prime L and Acuity Ultra R2 have all been recognized for excellence in product design.

## The new blueprint for wide format.

With this project, we gave ourselves the freedom to go right back to first principles, and that led us to create something quite different from anything either we – or anyone else – had created before.



### Good design starts with understanding

By seeking to understand everything, from the long-term business goals, to the day-to-day frustrations of the customers we serve, we give ourselves the best starting point for good product design.

That was where we began when we set out to redesign our Fujifilm Acuity range. We talk to our customers all the time, troubleshooting, consulting and offering technical support. But for this project we needed deeper conversations and more time in which to have them.

This wasn't a box-ticking survey sent out by email – this was our designers (a specialist industrial design agency, Realise Design, whom we'd appointed to support the Tokyo Design Team) shadowing our customers as they worked, looking for a thousand small ways to optimize their working experience – and therefore their businesses.

We looked at how improved product design could lead to improved usability, to enhanced performance and to a better ROI. The result was the launch of a brand new range of Acuity machines in 2021, that defined a 'new blueprint for wide format'.

This range now features dedicated roll and flatbed printers, along with a growing range of hybrid platforms.

# The best combination of productivity and quality

Common to all printers in Fujifilm's wide format range is the ability to produce the very best quality at the highest productivity. This means you can turn around high quality jobs faster than your competitors, and coupled with low ink consumption, represents an excellent return on investment.

Speed and quality have been engineered into these workhorse printers, and is partly due to the greyscale piezoelectric printheads that produce near-photographic print quality.





### **Instant printing without warm-up**

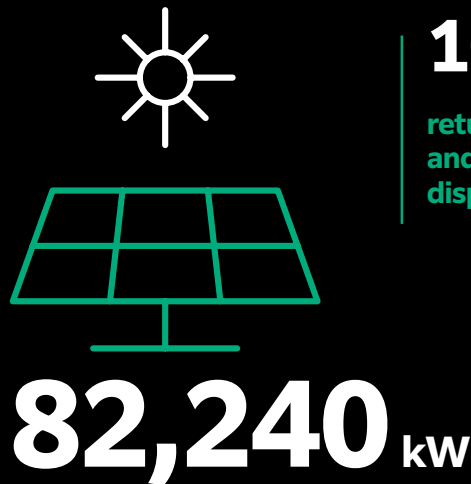
When a valuable rush job comes in, the last thing you want to do is wait for your printer to warm up. Most Fujifilm wide format printers offer instant-on capability through their LED curing systems. Start-up time is typically less than 5 minutes from power on until nozzle check is ready. In addition, shut down time for most printers is also less than 3 minutes, including shutdown maintenance.

# Focusing on a greener future





Fujifilm's ink R&D and manufacturing facility in Broadstairs, Kent, has regularly made the news as a four-time winner of the UK's Best Factory Award, but it is for its sustainability initiatives that it is now rapidly creating waves. The facility has implemented a wide range of initiatives to accelerate change towards a more sustainable operation.



of power was produced from our solar panels in June 2022, that's enough to power a typical UK household for 26 years

This is also 181% more power than the 29,185 kW produced in June 2021

**1000** liter IBCs

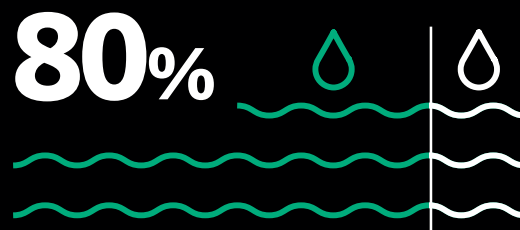
returned for cleaning and reuse, rather than disposing of them

**100%**

of our raw materials packaging is reused and recycled

We've saved **1 million** kW per year

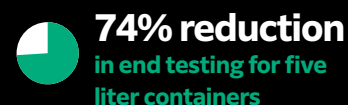
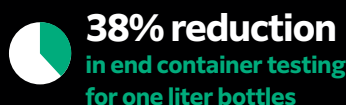
on conventional energy by turning our factory HVAC (heating, ventilation and air conditioning) systems off overnight



we replaced our oil-based solvent cleaner with an 80% water-based (aqueous) cleaning solution, combined with a 'world-first' pot washing machine



**In R&D we have achieved a...**



We have also cut back on the use of one, two and three liter pouches by 29%, 33% and 20% respectively

# Superb dot reproduction and bright vivid colors

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

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

## **Reassuringly consistent results**

To achieve high quality images and beautiful, vibrant colors 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 color pigment to be effectively dispersed and stabilized, resulting in an ink with high color intensity that resists both agglomeration and gravitational settling – so the ink has high color 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 stabilize 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.

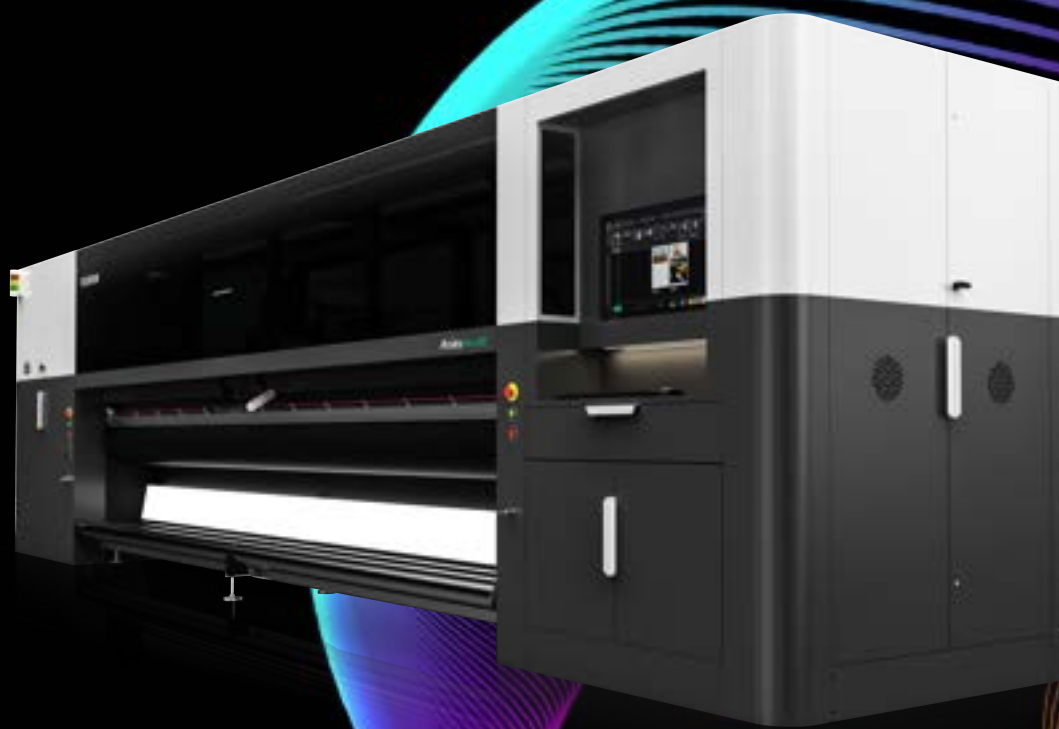
With the Acuity Ultra R2, you get the excellent high quality, productivity and reliability our Acuity range is known for, on a massive industrial scale. High performance printheads with a 3.5 picolitre drop size ensure consistent high quality print, and are combined with excellent build quality using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

# Voice of Customer



**The Acuity Ultra R2 is a perfect tool for our customers. It is the perfect combination of speed, quality and durability. It allows us to do multiple applications from wall coverings to highly detailed artistic prints.”**

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**Christian Rhodes - Chief Operating Officer**  
Colorchrome Art & Graphic Solutions

# 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 minimizes 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 colors at a later date or white too if needed. The scalable architecture allows you to maximize 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 m<sup>2</sup>/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

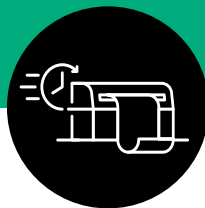
## Easy to use, saving time and money

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.



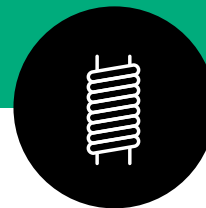
### Media crash detectors to prevent printhead damage

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 maximizes productivity for smaller jobs

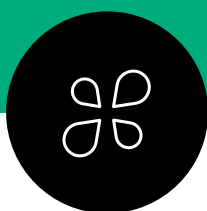
With a throughput of over 600 m<sup>2</sup> per hour, the machine has the potential to produce huge volumes of work when printing on three rolls simultaneously, as well as printing superwide format graphics up to five meters in width.



### Water-cooled vacuum table

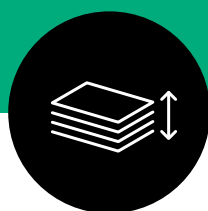
A unique chilled vacuum table maintains the substrate temperature while printing and allows the use of thin heat-sensitive substrates, reducing media shrinkage and wrinkling.





**Ink spitting to minimize 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 color and 6 color 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-density inks deliver superb color vibrancy and a wide color gamut. Excellent inter-coat laydown produces solid backlit colors and prints. The inks also do not exhibit cracking when folded due to the low ink build. The new high-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.



Acuity Ultra R2 Speeds						
Model	3206	3208W	3244	5006	5008W	5044
1 pass**	-	-	2852	-	-	7137
2 pass**	-	-	2056	-	-	3766
3 pass	1948	1948	1948	2540	2540	2868
4 pass	1755	1755	1755	2142	2142	2194
6 pass	1227	1227	1227	1485	1485	1526
8 pass	947	947	947	1119	1119	1119
*speeds in ft <sup>2</sup> /hr						

\*Print speeds are based on High Carriage Speed and 0% Smoothing printed to maximum width. \*\*1 Pass and 2 Pass modes only available on 3244 and 5044 models. All values are targets and subject to change without notice. The name FUJIFILM and the FUJIFILM logo are trademarks of FUJIFILM Corporation. All other trademarks shown are trademarks of the owners. All rights reserved.



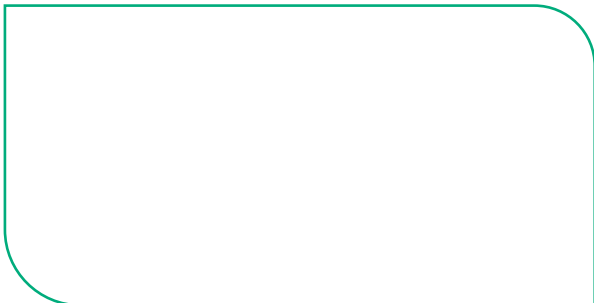
## Technical specifications

	LED Curing System				UV Curing System	
	3200 Series		5000 Series		3200 Series	5000 Series
<b>Model</b>	3206	3208W	5006	5008W	3244	5044
<b>Configuration</b>	CMYKLC LM	CMYKLC LM WW	CMYKLC LM	CMYKLC LM WW	CMYKCMYK	CMYKCMYK
<b>Printhead drop volume</b>	Grayscale, 3.5 pl - 14 pl				Grayscale, 3.5 pl - 14 pl	
<b>Printhead Technology</b>	Piezoelectric Drop-on-Demand Inkjet				Piezoelectric Drop-on-Demand Inkjet	
<b>Resolution</b>	Up to 1200 x 1200 dpi				Up to 1200 x 1200 dpi	
<b>Inks</b>	Uvijet AU Series				Uvijet GS Series	
<b>Maximum Media Width</b>	133.86" (3.40 m)		201.97" (5.13 m)		133.86" (3.40 m)	201.97" (5.13 m)
<b>Maximum Media Thickness</b>	0.078" (2.0 mm)				0.078" (2.0 mm)	
<b>Minimum Media Thickness</b>	0.004" (0.1 mm)				0.004" (0.1 mm)	
<b>Maximum Print Width</b>	126" (3.2 m)		197" (5 m)		126" (3.2 m)	197" (5 m)
<b>Maximum Media Weight</b>	882 lbs. (400 kg)		1,323 lbs. (600 kg)		882 lbs. (400 kg)	1,323 lbs. (600 kg)
<b>Maximum Roll Diameter</b>	Single Roll, Cradled: 15.75" (400 mm) On Air Core or Multi-Roll Printing: 13.4" (340 mm)				Single Roll, Cradled: 15.75" (400 mm) On Air Core or Multi-Roll Printing: 13.4" (340 mm)	
<b>RIP</b>	Caldera ColorGATE				Caldera ColorGATE	
<b>Network</b>	Ethernet TCP/IP, 1000 Base-T				Ethernet TCP/IP, 1000 Base-T	
<b>Power Requirements</b>	3-Phase, 400V AC, 60 Hz, 30A				3-Phase, 400V AC, 60 Hz, 30A	
<b>Power Consumption</b>	15 kW				21 kW	
<b>Compressed Air</b>	Pressure (min.): 8 kg/cm <sup>2</sup> (7.85 bar / 114 psi) Flow rate (min.): 1.2 m <sup>3</sup> /min (1200 l/min / 42.26 cfm)				Pressure (min.): 8 kg/cm <sup>2</sup> (7.85 bar / 114 psi) Flow rate (min.): 1.2 m <sup>3</sup> /min (1200 l/min / 42.26 cfm)	
<b>Environmental Conditions</b>	Temperature: 64°F – 82°F (18°C – 28°C) Humidity: 40% – 80% RH (non-condensing) Atmospheric dust: ≤0.15 mg/m <sup>3</sup>				Temperature: 64°F – 82°F (18°C – 28°C) Humidity: 40% – 80% RH (non-condensing) Atmospheric dust: ≤0.15 mg/m <sup>3</sup>	
<b>Dimensions (L x W x H)</b>	22.34' x 5.94' x 6.69' (6.81 m x 1.81 m x 2.04 m)		27.89' x 6.17' x 7.25' (8.5 m x 1.88 m x 2.21 m)		22.34' x 5.94' x 6.69' (6.81 m x 1.81 m x 2.04 m)	27.89' x 6.17' x 7.25' (8.5 m x 1.88 m x 2.21 m)
<b>Machine Weight</b>	10,472 lbs. (4,750 kg)		17,064 lbs. (7,740 kg)		10,472 lbs. (4,750 kg)	17,064 lbs. (7,740 kg)

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