# MUTOH

### Grow your business range with our renewed and improved

1625mm Roll to Roll UV-LED printer XpertJet 1682UR

#### MUTOH INDUSTRIES LTD.

MUTOH INDUSTRIES LTD. (Headquarters: Setagaya-ku, Tokyo, President: Yasuhiko Isobe; hereafter referred to as "MUTOH"), a subsidiary of MUTOH HOLDINGS CO., LTD. that develops, manufactures, and sells large-format inkjet and 3D printers, is announcing the beginning of sale of the new 1625mm Roll to Roll UV-LED printer XpertJet 1682UR, the successor to the previous ValueJet 1638UR Mark II model, as of today.

XpertJet 1682UR is a new, high-speed, versatile Roll to Roll UV-LED printer that was developed by thoroughly reviewing the specifications of MUTOH's previous models. It achieves a productivity increase of up to 63% compared to previous models, and enables printing of up to five layers in a single pass without pulling back. In addition, it uses US61, an ink with a safe composition that was made with regards to health risks, making it a printer that can be used safely for a variety of purposes. It is an all-rounder UV printer that has been further improved while maintaining MUTOH's unique technologies.

XpertJet 1682UR can be used for applications such as soft signage, window graphics, double-sided stickers, and seal labels, focusing on indoor signs and decorative graphics, and delivers high-speed and "Made in Japan Quality" that is ideal for markets such as store decorations, public facility decorations, and display boards.



6 coor (CMYK, White, Varnish) / 4 color (CMYK x 2)

XpertJet 1682UR's characteristics:

- 1. 63% productivity increase compared to previous models.
- 2. Up to 5-layer printing.
- 3. US61 ink, designed with health risks in mind.
- 4. Ease-of-use functions.

Compared to previous models, the renewed and improved XpertJet 1682UR is faster and capable of printing up to five layers in one pass, expanding its application range and supporting our customers' businesses demands.

Sales are scheduled to begin in Japan, Europe, and Asia.

#### § Main features

#### 1. 63% productivity increase compared to previous models

XpertJet 1682UR now includes a new Draft mode. It achieves an output speed of 27.3 m<sup>2</sup>/h, far exceeding the previous model's maximum speed of 16.7 m<sup>2</sup>/h. In addition, each printing mode, including the standard Production mode, has become faster, improving productivity.

Newly added Draft mode that reaches the maximum productivity of 27.3 m<sup>2</sup>/h



#### Printing speed (m<sup>2</sup>/h)

Print mode	4 colors CMYK	6colors CMYKWhVa	
Print mode	single layer	single layer	2 layers
Draft	27.3	13.2	7.1
High Speed	15.8	8.8	4.7
Production	13.0	6.8	3.4
Quality	8.9	4.4	2.0
High Quality	6.6	3.4	1.7

Wh : White, Va : Varnish

#### 2. Up to 5-layer printing

Up to five layers can be printed in a single pass as a standard feature. Because of this there is no need to pull back the media in between layers and you can expect to print with minimal deviation in layer accuracy and minimal risk of misalignment or overlapping layers. This allows for stable printing, reduces dust adhesion and limitations on printing length.

#### ◆ Ink configuration and multi-layer printing

Ink is available in 4-color (CMYK x 2) and 6-color (CMYK, White, Varnish) settings. When using the 6-color setting, you can print up 5 layers by combining the inks. For 1-layer printing, you can print with color, white, or varnish, and for 2-layer printing, you can freely set white + color, color + varnish, or the reverse combination. For 3-layer printing, you can set it according to your purpose, for example color + white + color on transparent media, or white + color + varnish on metallic paper. For 4-layer printing, you can print color + white + color + color for backlit sign applications, and for 5-layer printing, you can print different designs on the front and back of the paper with color + white + black + white + color on transparent media.

#### Print in one pass without pulling back **5** layers



Print different designs on front and back

4 layers

#### Print backlit signs that change design with lights turned on or off



\* Images for illustrative purposes



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Lights on
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Lights off

#### 2·3 layers

Achieve a variety of printing finishes by using white and varnish inks Print window graphics and interior illuminated signs









Illuminated signage that looks great with or without the backlight on

#### 3. US61 ink, designed with health risks in mind

US61 is a UV-LED ink that takes into consideration the health risks. It is also an excellent ink that combines flexibility and abrasion resistance for ease-of-use.

#### ◆ Ink characteristics that show the consideration regarding health risks

US61 ink complies with the latest chemical substance regulations in the EU region, where environmental regulations are strict, and does not use any substances classified as CMR Category 1 (1A, 1B)\* or SVHC (Substances of Very High Concern) in anticipation of future regulations\*. It is a UV ink that is considerate of the health of workers and the environment.

\*1 CMR refers to substances that are carcinogenic, mutagenic, or reprotoxic. Category 1 is classified as substances that are carcinogenic, mutagenic, or reprotoxic to humans.

\*2 As of September 2024

#### ◆ Functions and working characteristics

- Achieves both flexibility and abrasion resistance Can be printed on flexible materials used as soft signage and window graphics
- Greatly expanded application compatibility
  - It can be printed on a wide range of media, including PVC (polyvinyl chloride), which is mainly used for signage, as well as resin films such as PET and PU (polyurethane), cloth, and paper.
- Ink replacement takes less effort Ink can be replaced simply by changing the ink bag or cartridge with less risk of touching the ink directly with your hands
- Low waste and long-term use Expiration date 12 months post manufacturing

#### 4. Ease-of-use-features

XpertJet 1682UR is equipped with a variety of functions that greatly assist the operator.

This model meets users' demands with its various functionality and usability, making daily workflow more efficient.

#### • MUTOH's unique technologies for automation and efficiency:

Automatic Bi-Directional adjustment "DropMaster 2"

Built-in sensor on the carriage automatically calibrates bi-directional alignments, and saves time and reduces validation in adjustment among different operations.

• Automatic media feed adjustment "FEED MASTER"

A printing pattern is printed and read by a sensor to automatic media feed correction.

• Media roll balance management "Media Tracker"

Before replacing the media, a barcode indicating the remaining amount is

printed on the media. When it is loaded, the barcode is read to determine the remaining amount media. This makes the management of multiple media rolls more efficient.

#### ◆ Three-stage head height adjustment function

By selecting the optimum print head height and improving compatibility with media, the risk of contact is reduced and stable print quality is achieved. (Low1.5mm,Middle2.0mm,High2.5mm)



#### ◆ Take-up system (optional)

The 30kg maximum capacity take-up unit is linked to the printer. When the printing process stops, so does the take-up system. It is safe to use even for unattended printing at night time.

#### ◆ MUTOH Status Monitor

Software that allows you to check the printer status in real time on your computer.

#### ♦ MUTOH Club

"MUTOH Club" is a free cloud service that offers MUTOH printer users access to remote monitoring and resources, provides operation status, ink consumption, printer status information, error information, as well as various tools and information to support customers.

By bringing XpertJet 1682UR to the market, MUTOH will continue to respond to the diverse needs of its customers.

Contact

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## § Specifications

Printer model		XPJ-1682UR		
Print head	Print method	On-demand piezo drive system		
	Head height	Low: 1.5mm / Middle: 2.0mm / High: 2.5mm		
	Number of head	2		
Media	Roll media width	Maximum: 1,625mm		
	Maximum media thickness	0.3mm / 0.8mm / 1.3mm		
	Diameter	φ200mm or less		
	Core diameter	2 or 3 inches		
	Weight	30kg or less		
Maximum printable width		1,615mm		
Ink	Туре	UV-LED ink (US61 / *US11 ) (*For Asia)		
	Color	4 colors (CMYK), 6 colors (CMYKWhVa)		
	Capacity	800ml bag (US11-Wh:500ml Bag)		
Print resolution		Maximum 1440 dpi		
Interface		Gigabit-Ethernet (1000BASE-T)		
Power supply		Voltage: AC 100V~120V ± 10%/ AC 200V~240V ± 10% Frequency: 50/60Hz ± 1Hz		
Environmental condition	Printer operation	Temperature: 20°C~32°C Humidity: 40%~60% No condensing		
	Accuracy guaranteed	Temperature: 22°C~30°C Humidity: 40%~60% No condensing		
Power consumption		During printing: AC100V~120V/AC200V~240V, 950W or less Sleep mode: AC100V~120V/ AC200V~240V, 21W or less		
External dimensions		(W) 2,770 x (D) 895 × (H) 1,504mm (Including large capacity ink bag adapter)		
Weight		181kg (Printer body: 149kg, Stand: 32kg)		
RIP software		VerteLith (MUTOH genuine RIP software)		