

# ONLY WIDE FORMAT FLATBED UV-LED PRINTER ON THE MARKET THAT PRINTS UP TO 200 mm IN HEIGH

# Extended productivity and creativity up to 200 mm in height

Azon MATRIX represents only wide-format UV-curable inkjet flatbed printer on the market with the ability to print up to 200mm in height. With optional S, M and L bed sizes; 700 mm x 1900 mm / 700 mm x 2500 mm / 1200 mm x 3300 mm which are handling heavy materials up to 100 kg for indoor, outdoor and industrial applications. Prints directly onto any type of material like PET, ABS, polycarbonate, TPU, wood, stone, glass, canvas, ceramic, aluminum, and leather. Azon MATRIX represents an ideal solution for gaining profit from lower running costs. Capable of robust industrial printing demands including heavy, rigid materials and high-quality volume printing requirements (USB drives, smartphone cases, lighters, pens etc.) Azon MATRIX is covering a wide variety of business printing applications. With long-lasting, highly energy-efficient UV LED lamp curing system instantly and efficiently adheres ink to any kind of substrates. Its robust bed, smart vacuum table, Full-featured Azon RIP software and UV TurboJet ink technology ensure a perfect result on each and every print.

# Reliable and compatible system

Azon MATRIX series features a monoblock structure with electronic components built securely into the body of the machine. This unique monoblock design allows for simple installation and the flexibility for the system to be relocated to a multitude of locations. Precision lead screw feature provides high reliability and repeatability that increase performance and accuracy. Thanks to the use of ball bearings between the rail and the block, it is possible for a linear guideway to achieve extremely precise linear movement. Its aluminum frame reduces vibration and adds supporting strength, while its zoned vacuum bed holds media steady to ensure stable printing. Reduced operator interventions guarantee improved productivity.

# Capabilities for handling a wide range of applications

With 2880 dpi resolution Azon MATRIX prints near photographic image quality on versatile substrates and expands possibilities to more personal and creative applications ensuring a high productivity and perfect result on printing. Azon MATRIX prints on practically any rigid and sheet material and it focuses both on functional communication with creative applications. Therefore it can be highly usable in different industries with a request for high-quality volume printing like leather industry, tradeshow graphics, interior decorations, sign industry, furniture industry etc. Dual security mode for automatic media thickness detection and head protection secure print head from

damages before print starts while powerful zoned vacuum system keeps material flat and allows printing on soft and thin materials with remarkable precision. Enhanced media presets included for added convenience will open doors to endless business areas.

## **Efficient ink system models**

Always striving to meet versatile requests of our customers, Azon MATRIX comes with 500 ml bulk-ink system. In order to maintain accurate high-quality printing even during long production runs, Azonprinter incorporated six specially designed bulk ink tanks with monitoring sensors which are built to meet the demands of high volume operations. Each tank holds 500 ml of ink which is extremely easy to handle and remove. Azon's unique automated ink recirculation system circulates the white ink in the machine on every start up and shut down of the machine to prevent the ink settling. Ink tanks can be refilled from ink bottles, ink waste is minimized and you can print continuously without interruptions. In addition, this system controls the discharge of white ink, reducing ink waste and eliminating manual maintenance.

## New vibrant and colorful UV TurboJet inks

To meet customers' business requirements, ink configuration comes in CYMK+2x White + 2x Clear. New UV TurboJet ink available for the new Azon MATRIX are improving the quality of print dramatically. Vibrant and colorful prints can be expected on any type of material: stone, glass, wood, plastic, and canvas regardless for indoor or outdoor use. The

versatility of white ink as a base for high-density CMYK layer delivers unusual and creative textures on all materials.

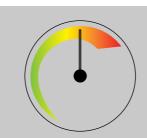
# Advanced AZON RIP software for unique special effects

Full-featured Azon RIP software is offering different features, tools and add-ons like printing up to 5 layers in inline mode depending on resolution, fading and changing the number of used nozzles, creating emboss or raised print up to 2mm allowing customers to print any ADA- compliant and Braille script standard requested. Azon RIP allows users to instantly choose the proper settings for their most popular applications which dramatically increase the printer's productivity and overall performance.

## **Rotax adapter for cylindrical printing**

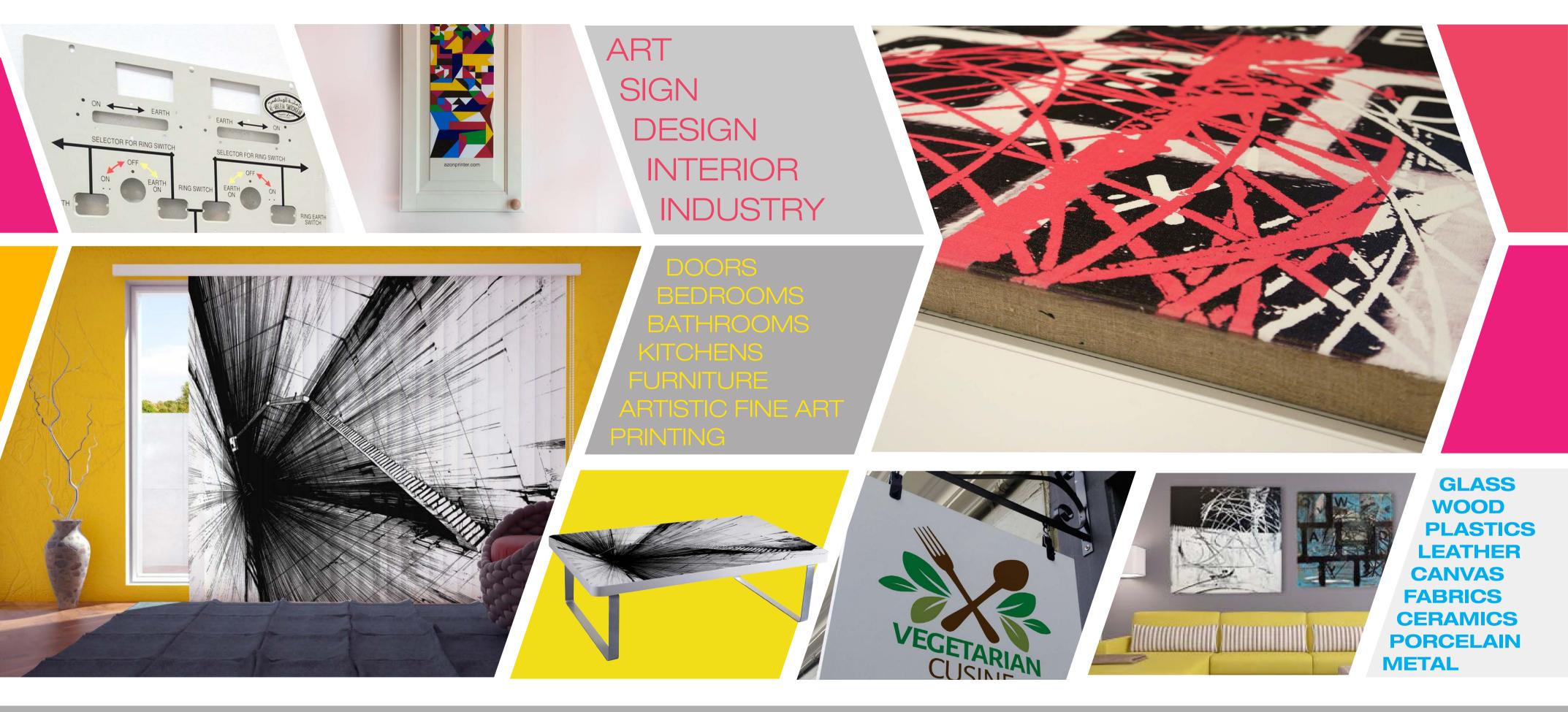
The possibilities of digital printing have now been doubled with a specially designed rotary adapter. Rotax allows printing on a vast range of cylindrical objects with a diameter ranging from 41 mm to 127 mm and height up to 279 mm. Print on cylindrical and cone objects such as beer and wine glasses, cups, candles, tube, cans, tanks, vases, awards and much more. Rotax makes cylindrical printing efficient and precise by delivering both white and full-color prints.

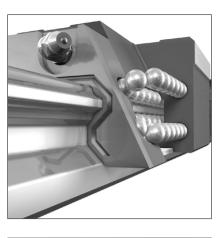












#### **Linear Guideway**

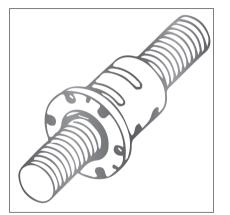
A linear guideway facilitates linear movement using ball bearings. Thanks to the use of ball bearings between the rail and the block, it is possible for a linear guideway to achieve extremely precise linear movement. In comparison with a conventional guide rail, the friction coefficient is only one fiftieth. Due to the restricted guidance of the block on the rail the linear guideway can carry loads in vertical and horizontal directions.



#### **Monoblock Design**

The MATRIX series features a body with electric components built securely into the body of the machine. This unique monoblock design allows for simple installation and the flexibility for the system to be relocated to a multitude of locations.

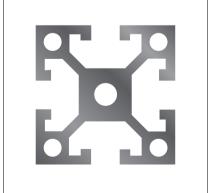
Each Mono Block machine is specifically designed to suit product demands, space constraints, and the production environment in order to optimize output and produce the best product possible.



#### **Ball Screw with Rotary Nut**

Precision ball screws feature high reliability and repeatability that increase performance and accuracy.

- Capable of Fast Feed Since the ball screw nut rotates with the screw shaft being fixed, it can be fed at high speed despite a thin screw shaft. This allows a small driving motor to be used.
- Smooth Motion It achieves smoother motion than rack-and-pinion based linear motion. In addition, since the screw shaft does not rotate because of the ball screw nut drive, this model does not show skipping, produces low noise and generates little heat.
- Low Noise Level Even In High-Speed Rotation This model produces very low noise when its balls are picked up along the end cap. In addition, the balls circulate by passing through the ball screw nut drive, allowing this model to produce minimum noise in high-speed operation.
- **Compact** Since the nut and the support bearing are ntegrated, highly accurate and compact design is achieved.



### **Sturdy Aluminum Profile**

The rigid construction of the aluminium profile gives the MATRIX a sturdy yet light structure.



Azonprinter launched the perfect fit, so far a complete full-featured Azon RIP software and it is offering different features, tools and add-ons like printing up to 5 layers in inline mode depending on resolution, fading and changing the number of used nozzles, creating emboss or raised print up to 2mm allowing customers on that way to print any ADA- compliant and Braille script standard requested, fading and number of used nozzles, creating embossed or raised print up to 2 mm, decreases needs for Illustrator, CorelDraw, Photoshop and so many more. Azon RIP allows users to instantly choose the proper settings for their most popular applications which dramatically increase the printer's productivity and overall performance.





Model			Azon MATRIX
Printing Method			Piezo ink-jet method
Acceptable Media W x D Matrix / pro W x D Matrix pro L Thickness Weight			Maximum 700 mm x 1900 mm / 700 mm x 2500 mm
			Maximum 1200 mm x 3300 mm
			Maximum 200 mm (7.9 in.)
			Maximum 100 kg (220.5 lbs.)
Maximum printing size (W x D) Matrix / pro Matrix pro L			580 mm x 1200 /1800 mm (UV) / 600 mm x 1200 /1800 mm (DTS)
			1100 mm x 2500 mm
Ink bottles	Color (UV/TEX/DTS)		CMYK2W2G/CMYK4W/CMYKLKLCLMLLK
	Ink (UV/TEX/DTS)		Azon UV / Azon DTS / Azon TEXTILE
	Type (UV/TEX/DTS)		UV 500 cc bottles / TEX 220 cc cartridges / DTS 220 cc cartridges
Print Resolution (dpi)			Maximum 2880 dpi
Print direction			Unidirection / Unidirection back (UV) / Bi-Direction (DTS, Tex)
Connectivity			Ethernet (10BASE-T/100BASE-TX, automatic switching)
Power requirements			AC 110/220 V +-10%, 1.05 A (50/60Hz)
Power consumption			During operation: Approximately 231 W
			During standby: Approximately 59.4 W
Printer dimensions (WxDxH) Matrix Matrix pro L			1300 mm x 2150 mm x 1140 mm, Weight 400 kg
			1850 mm x 3430 mm x 1140 mm , Weight 600 kg
Requested	During	Temperature	20°C ~ 30°C (68°C to 86°F), (22°C / 72°F is recommended)
Environment	operation	Humidity	45% ~ 80% RH (no condensation)
	Not	Temperature	18°C ~ 30°C (64.4°F ~ 104°F)
	operating	Humidity	40% ~ 80% RH (no condensation)
	Dust level:		General office level
Accessories			Power cord, Ethernet cable, User documentation
Rip Software			Azon Rip

















