

## **Hybrid Anapurna LED series**

# Hybrid UV led inkjet printers with integrated roll-to-roll system

High-speed hybrid 4/6-color + white UV LED-curable inkjet systems with a printing width ranging from 1.6 m up to 3.2 m for indoor and outdoor applications.



# **Hybrid Anapurna LED series**



Outstanding print quality on backlit applications

The wide-format hybrid Anapurna i LED-series is a perfect fit for sign shops, digital printers, photo labs and mid-size graphic screen printers that want to combine board and roll-to-roll print jobs. The engines print at a width up to 3.2 m and combine excellent quality with high productivity for outdoor and indoor jobs. The hybrid Anapurna's are equipped with UV LED lamps, enabling you to print on a wider media mix and to save energy, costs and time. The white ink function creates possibilities for printing on transparent material for backlit applications or for printing white as a spot color. With the optional automatic board feeder, productivity is increased even more.

#### Reliable workhorse

Featuring a robust and industrial engineered concept fit for sustained higher workloads, and incorporating the latest generation of fast-firing print heads, the hybrid Anapurna i-series with UV-LED curing offers fast throughput while also achieving excellent print quality. You will be able to maintain a high print production on all your substrates, satisfying your most demanding customers. Borderless or multiple boards printing increase productivity even more

#### A wide range of applications

The Anapurna i LED-series adds more versatility to your business as it expands your range of applications. It produces top-quality prints on uncoated rigid media, such as corrugated boards, rigid plastics, exhibition panels, stage graphics and advertising panels, as well as on roll media such as film, vinyl and paper, banners, canvas and coated textile. It can also be used to print niche products such as wood, DVDs or personalized objects, or to create architectural and interior decoration.

The use of specialty inks and the little heat generated by the LED array passing over the substrate allows you to print on a wider range of materials. As a result, the engines can print on thin heat-sensitive styrene as well as everything from foils and laminates to coated paper, PET, fluted polypropylene, soft foam boards, or industrial film.







#### **Top quality**

Thanks to a reinforced belt drive and shuttle beam, the hybrid Anapurna i LED printers bring a highly accurate dot positioning and thus excellent image quality, which is further enhanced by the gradient and multi-layer functionality. The six 12 picolitre color heads (four color heads for the Anapurna H1650i LED) guarantee printing of good solids, fine text reproduction of up to 4 pt, good tonal rendering and low ink consumption. The two 30 picolitre white ink heads will allow you to print white in multiple modes.

#### Multiple board and automatic board printing

The Anapurna H2050i and H2500i can have an automatic board feeder added in order to increase productivity substantially. This optional table provides an automated solution for volume printing of small board sizes up to four boards can be printed in parallel on the Anapurna H2050i LED and up to five boards on the Anapurna H2500i LED. The borderless printing feature makes post-finishing superfluous.

#### **UV LED print technology**

Equipped with powerful, air-cooled 16 Watt/cm<sup>2</sup> UV LED lamps for the curing process, the hybrid Anapurna LEDs come with a number of economical, ecological and business-generating benefits:

- LEDs are cool to the touch and have minimal heat output, which is why they allow for a **broader scope of print applications**.
  They enable you to print on heat-sensitive substrates such as thin slides, self-adhesive sheets or stretched PVC materials, for example.
- LED lamps can be switched on and off instantly, without any degradation of intensity. That means there is no lamp warm-up time or delay for shutter motion. The result? Faster operations and **higher productivity**.
- LEDs last for at least 10,000 hours each, which means that dependent on the usage they can last as long as five years or up to a printer's lifetime. They generate a **consistent output** throughout that period.
- LEDs have a lower energy consumption than mercury bulb lamps, which leads to **significant power savings and a higher ROI in the long run**.
- As UV LED lamps **don't contain mercury**, there is no need for mercury disposal or any related costs. Also, LEDs d**on't produce ozone gas** that needs to be extracted by ventilation.

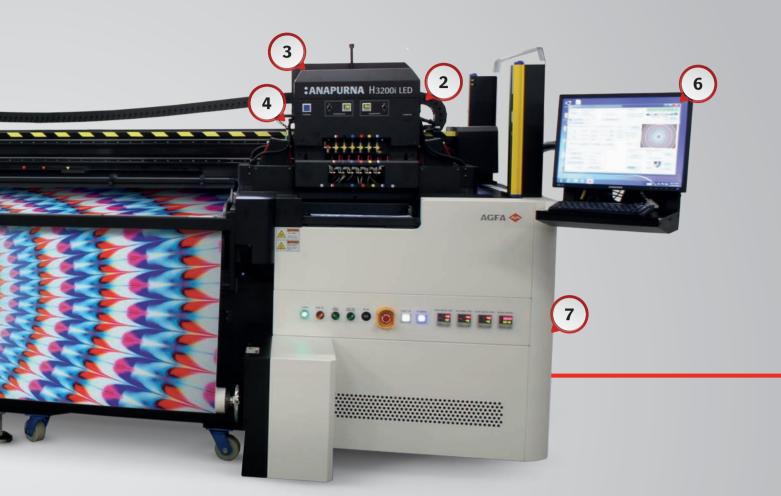
### **Designed for the greatest possible deployment and convenience**.



- 1. Flawless media handling Media loading is smooth and accurate thanks to automated features such as the media registration bar and head height adjustment. The automatically controlled vacuum system, consisting of four zones, delivers an equal vacuum during the printing process, whether printing roll or rigid materials. This ensures flawless media transport, giving accurate print results at all times.
- LED lamps Air-cooled UV LED lights provide huge energy savings and are ideal for thermally sensitive materials due to the minimal energy output, e.g. thin slides, self-adhesive sheets, or stretched PVC materials.
- **3. Ionization bars** Ionization bars mounted on the carriage remove electro-static charges on the substrate, ensuring optimum ink droplet placement.
- **4. Shuttle safety sensors** A set of shuttle safety sensors prevents print heads from touching the substrate and getting damaged.
- 5. Multiple board and borderless printing Multiple board printing is possible to maximize your productivity even more. The borderless printing feature makes post-finishing superfluous. The Anapurna H2050i and H2500i LED can be equipped with an automatic board feeder for volume printing of small board sizes—up to five boards in parallel (four for the Anapurna H2050i LED).
- 6. Convenient operator interface All settings are conveniently arranged in a powerful straightforward graphic user interface on

a swivel-arm mounted touch screen. Printed files are being spooled, viewed and stored by an internal bitmap server with a HD of 1 TB for ripped images for fast spooling and secure transfer of big amounts of data.

- 7. Ink monitoring During production the ink levels are monitored by the automatic ink refill system. The ink (re)filling system can be accessed easily, enabling a spotless refill of your ink containers. The white ink is managed by a fully separate system (circulation, under-pressure regulation and cleaning circuit). The tank containing it is equipped with a stirring mechanism to keep the ink properly mixed at all times.
- 8. **Reinforced beam** Sees to it that the shuttle moves about flawlessly ensuring accurate dot placement.
- **9. Inflatable airshaft** In the roll-to-roll mode, inflatable airshafts both on the unwinding and rewinding side, as well as a media tension roller on the rewinding side, assure perfect tension of the materials and wrinkle-free printing. While these features are standard on the Anapurna H2050i LED, the Anapurna H2500i LED and the Anapurna H3200i LED, they come as options on the Anapurna H1650i LED, replacing the default combination of the metal unwinding shaft with media free fall.
- Extended media tables The Anapurna H2050i LED, the Anapurna H2500i LED and the Anapurna H3200i LED come standard with an additional set of large media tables that are to be coupled to the default rigid tables. This makes it possible to print on rigids up to a length of 3.2 m. With the entry-level Anapurna H1650i LED, these additional large media tables can be acquired as an option.





Outdoor communication - viny

In-house decoration – tiles

Object printing – cardboard



## Agfa Graphics inkjet inks – always spot on

#### Wide color gamut, no matter the medium

Agfa-made UV inks boast a wide color gamut and high color vibrancy in both indoor and outdoor applications. Providing outstanding adhesion– even on the most difficult substrates–these inks are your best option in terms of flexibility, image longevity and outdoor resistance. All of our UV inks–white and color–offer outstanding, stable jetting performance and deliver the same high-quality results, batch after batch.

#### Agfa's UV-curable LED inks: always spot on

Relying on LED technology, our specially-formulated UV LED inks can print on heat-sensitive substrates, thus broadening the scope of possible applications. They are both customized and versatile, developed with a view of the many different media they are intended for, as well as the specifications of different print engines. Our inks for flexible media, for example, are perfectly suited for stretchable and bendable materials.

#### Vivid prints, low ink consumption

Thanks to the high pigment load of our inks, ink consumption per square meter is the lowest on the market. This 'thin ink layer' pigment dispersion technology not only results in eye-catching prints; it also helps preserve the environment and saves on your budget. In short, these inks offer the best possible price/quality ratio.

#### Advanced white printing and white ink management

Printing on backlit media? Creating an opaque white background? Using white as a spot color? The hybrid Anapurna LEDs supports white printing in multiple modes (e.g. pre-white, post-white, sandwich white) on both rigid and roll media. The stirring functionality keeps the white ink in motion at all times. Constant recirculation flows along the ink lines–all the way to the temperature-controlled printer heads–limiting the risk of ink resettling and lines becoming blocked or clogged.





In-house decoration – dibond



Outdoor communication - vinyl

## **Powered by Asanti**

#### The Anapurna hybrid printers are driven by Agfa Graphics' Asanti

wide-format workflow software, which controls the entire printing process from prepress to production and finishing. As such, it simplifies, optimizes and automates as many steps as possible, offering you a high-performance solution for increased productivity.

#### Accuracy and consistency

The huge variety of file types to be handled significantly slows down the processing of print jobs and often leads to errors. These difficulties are overcome with the Asanti software. As the print settings for different media are stored in a database, Asanti is able to quickly call up the appropriate specifications and apply them. Rendering, image and color quality are automated, and Asanti checks files prior to printing, ensuring layers and transparency have been handled correctly, while flagging potential issues. By dramatically simplifying the task of the operator, reducing idle time and efficiently tackling issues prior to printing, turnaround is reduced and productivity is increased.

#### **Intuitive GUI**

The Asanti GUI works with improved visualization of the job layout and positioning: operators can see exactly what they are printing. The GUI offers access to key print parameters to make sure any last-minute changes are quick and easy to apply. Job preparation takes place independently from the Anapurna operation due to the client-server infrastructure. This complements the autonomy of the machine beautifully; ensuring operators are not tied to the printer when other tasks demand their attention.

#### **StoreFront**

StoreFront, a comprehensive web-to-print service, is designed to handle incoming orders from the internet. Automated payment processing and error-free print preparation ensure new jobs are ready for printing in no time and with a minimum of operator intervention.

StoreFront web-to-print software



#### Integrable with PrintSphere

As a highly-advanced printer powered by Asanti, the hybrid Anapurna LEDs integrate perfectly with PrintSphere, Agfa Graphics' cloud-based service for production automation, easy file sharing and safe data storage. This integrable cloud service offers a standardized way for print service providers to automate their workflows and facilitate data exchange with customers, colleagues, freelancers, other departments and other Agfa solutions.

#### **Technical specifications**

#### AGFA GRAPHICS

MODELS	Anapurna H1650i LED	Anapurna H2050i LED	Anapurna H2500i LED	Anapurna H3200i LED
MEDIA & PRINTING SPECIFICATION	IS			
Rigid media				
Maximum width	165 cm (5.4 ft) 160 cm (5.2 ft) with borderless printing	205 cm (6.7 ft) 200 cm (6.6 ft) with borderless printing	250 cm (8.2 ft) 247 cm (8.1 ft) with borderless printing	320 cm (10.5 ft) 316 cm (10.3 ft) with borderless printing
Maximum length	3.2 m (10.5 ft) - 4 rigid tables (2 rear & 2 front) Supported by 1 rigid roller table: 140 cm (4.59 ft)   Supported by 1 rigid roller table: 140 cm (4.59 ft) Supported by 1 rigid roller table: 140 cm (4.59 ft)			
Minimum size	A2 landscape (60 x 42 cm - 1.97 x 1.4 ft)			
Thickness	Minimum thickness: 1 mm (0.04") Maximum thickness: 45 mm (1.77")			
Maximum weight	10 kg/m <sup>2</sup> on printing table (22 lb)			
Flexible media				
Maximum width	165 cm (5.4 ft)	205 cm (6.7 ft)	250 cm (8.2 ft)	320 cm (10.5 ft)
Maximum length		n/a – restric	ted by weight and diameter	
Thickness	Min. 0.2 mm			
Maximum weight	50 kg (110 lb) roll v (220			0.31kg (0.682 lb) per cm (0.4") roll width, meaning 100kg (220 lb) evenly distributed over the full 3.2 m (10.5 ft) width
Maximum roll outside diameter	Support for 3" core-media rolls –     maximum media roll diameter     30 cm (11.8") (larger diameter     yo to     50 cm (19.7") can be allowed     within the distributed weight     limitation, in case only print side     OUT is used – both unwinder     and winder)			
Borderless printing flexible media	160 cm (5.2 ft)	200 (6.6 ft)	247 cm (8.1 ft)	316 cm (10.3 ft)
PRODUCTIVITY				
Draft mode	Up to 63 m <sup>2</sup> /h (up to 678 ft <sup>2</sup> /h)	Up to 104 m²/h (Up till 1,119 ft²/h)	Up to 115 m²/h (up till 1,238 ft²/h)	Up to 129 m <sup>2</sup> /h (up to 1,388 ft <sup>2</sup> /h)
Express mode	44-54 m²/h (474-581 ft²/h)	64-71 m²/h (689-764 ft²/h)	70-78 m <sup>2</sup> /h (753-840 ft <sup>2</sup> /h)	77-87 m²/h (829-936 ft²/h)
Production mode	Up to 28 m <sup>2</sup> /h (301 ft <sup>2</sup> /h)	32-52 m <sup>2</sup> /h (344-560 ft <sup>2</sup> /h)	35-57 m <sup>2</sup> /h (377-614 ft <sup>2</sup> /h)	39-64 m <sup>2</sup> /h (420-689 ft <sup>2</sup> /h)
Standard mode	13-17 m²/h (140-183 ft²/h)	19-28 m <sup>2</sup> /h (204-301 ft <sup>2</sup> /h)	21-31 m²/h (226-334 ft²/h)	23-34 m <sup>2</sup> /h (248-366 ft <sup>2</sup> /h)
High-quality mode	Up to 7 m <sup>2</sup> /h (75 ft <sup>2</sup> /h)	14-15 m²/h (151-161 ft²/h)	16-17 m <sup>2</sup> /h (172-183 ft <sup>2</sup> /h)	9-19 m²/h (97-205 ft²/h)
PRINT HEADS & INKS				
Print heads	4 Konica-Minolta KM1024i- heads: 1024 nozzles/head with a droplet volume of 12 pl (colors) 2 Konica-Minolta KM1024i- heads: 30 pl (white in line) Or 6 Konica-Minolta KM1024i- heads: 1024 nozzles/head with a droplet volume of 12 pl (colors)	6 Konica-Minolta KM1024i-heads: 1024 nozzles/head with a droplet volume of 12 pl (colors) 2 Konica-Minolta KM1024i-heads: 30 pl (white in line)		
Ink	Or CMYKLcLm Or CMYK + white	CMYKLcLm + white		
IMAGE & TEXT QUALITY				
High-quality prints	Up to 720 x 1400 dpi			
Text quality	Positive: 4 point / Negative: 6 point			
ENGINE DIMENSIONS & WEIGHT				
Printer dimensions (H x W x L)	166 x 391 x 147 cm	177 x 450 * x 160 cm (70 x 177 * x 63") *without swivel arm	177 x 500 * x 160 cm (70 x 197 * x 63") *without swivel arm	177 x 572 x 193 cm (70 x 225 x 76")
Weight	1,020 kg (2249 lb)	1,800 kg (3968 lb)	2,200 kg (4850 lb)	2,800 kg (6170 lb)
ELECTRICITY & COMPRESSED AIR				
Electricity	380 V 3-phase star connection with Neutral wire (3x 32A*) 50/60Hz			
Compressed air	Oil free (class 1 according to ISO 8573-1 2010), 160 L/min compressor with 50 L barrel @6bar			
SYSTEM INTEGRATION RIP/WORK	FLOW SOFTWARE			

Integrated production solution with Asanti, third-party RIP integration possible

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