

## Anapurna H1650i LED

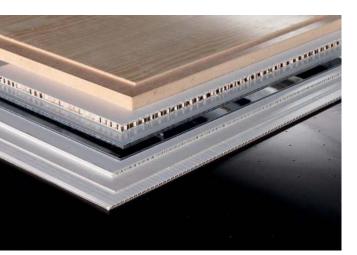
## Hybrid UV LED inkjet printer with integrated roll-to-roll system

Entry-level hybrid 6-color or 4-color + white UV LED-curable inkjet systems with a printing width of 1.65 m for indoor and outdoor applications.



## Anapurna H1650i LED







The entry-level wide-format hybrid Anapurna H1650i LED 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 1.65 m for outdoor and indoor jobs. The Anapurna H1650i LED is 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.

#### 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 Anapurna H1650i LED offers a fast throughput while also achieving excellent print quality on a wide variety of substrates. Borderless or multiple boards printing will increase productivity even more.

#### A wide range of applications

The Anapurna H1650i LED 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 Anapurna H1650i LED brings a highly accurate dot positioning and thus excellent image quality, which is further enhanced by the gradient and multi-layer functionality. The four to six 12 picolitre color heads guarantee printing of good solids, fine text reproduction of up to 4 pt, good tonal rendering and low ink consumption. Two 30 picolitre white ink heads will allow you to print white in multiple modes.



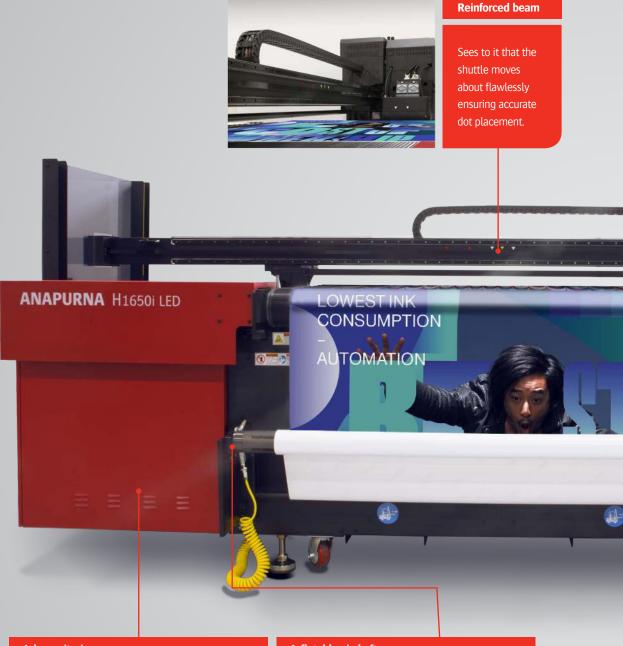
#### **UV LED print technology**

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 don't produce ozone gas that needs to be extracted by ventilation



# Designed for the greatest possible deployment and convenience



#### **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.

#### Inflatable airshaft

In the roll-to-roll mode, the default combination of the metal unwinding shaft with media free fall can be replaced with optional inflatable airshafts both on the unwinding and rewinding side, as well as a media tension roller on the rewinding side, to assure perfect tension of the materials and wrinkle-free printing.

#### **Ionization bar**

Ionization bars mounted on the carriage remove electro-static charges on the substrate, ensuring optimum ink droplet placement.

**Shuttle safety sensors** 

A set of shuttle safety sensors prevents print heads from

touching the substrate and

getting damaged.

#### **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.

#### **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.

### Multiple board and borderless printing

Multiple board printing is possible to maximize your productivity even more. The borderless printing feature makes post-finishing superfluous.

#### 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.

#### **Extended media tables**

Optionally, the Anapurna H1650i LED can be equipped with an additional set of large media tables. This makes it possible to print on rigids up to a length of 3.2 m.





# 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 Anapurna H1650i LED 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.



Outdoor communication – vinyl



In-store communication - Dibond



Outdoor communication - vinyl

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StoreFront web-to-print software

## **Powered by Asanti**

The Anapurna H1650i LED is 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**

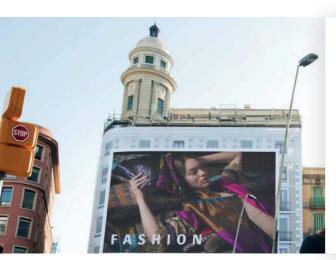
The huge variety of file types to be handled significantly slows down the processing of print jobs and often leads to errors. These difficulties are overcome with the Asanti software. As the print settings for different media are stored in a database, Asanti is able to quickly call up the appropriate 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.



#### 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.

Outdoor communication - vinyl

#### **Technical specifications**

MODEL	Anapurna H1650i LED
MEDIA & PRINTING SPECIFICATIONS	
Rigid media	
Maximum width	165 cm (5.4 ft) 160 cm (5.2 ft) with borderless printing
Maximum length	3.2 m (10.5 ft) – 4 rigid tables (2 rear & 2 front)
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	$10 \text{ kg/m}^2$ on printing table (22 lb)
Flexible media	
Maximum width	165 cm (5.4 ft)
Maximum length	n/a - restricted by weight and diameter
Thickness	Min. 0.2 mm
Maximum weight	50 kg (110 lb)
Maximum roll outside diameter	Support for 3" core-media rolls with maximum outside diameter 36 cm (14.17")
Borderless printing flexible media	160 cm (5.2 ft)
PRODUCTIVITY	
Draft mode	Up to 63 m <sup>2</sup> /h (up to 678 ft <sup>2</sup> /h)
Express mode	44-54 m <sup>2</sup> /h (474-581 ft <sup>2</sup> /h)
Production mode	Up to 28 m $^2$ /h (301 ft $^2$ /h)
Standard mode	13-17 m <sup>2</sup> /h (140-183 ft <sup>2</sup> /h)
High-quality mode	Up to 7 m $^2$ /h (75 ft $^2$ /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)
Ink	Or CMYKLcLm Or CMYK + white
IMAGE & TEXT QUALITY	
High-quality prints	Up to 720 x 1400 dpi
Text quality	Positive: 4 point / Negative: 6 point
ENGINE WEIGHT & DIMENSIONS	
Printer dimensions (H x W x L)	166 x 391 x 147 cm
Weight	1,020 kg (2249 lb)
ELECTRICITY & COMPRESSED AIR	
Electricity	380 V 3-phase star connection with Neutral wire (3x 32A) 50/60Hz 230V 3-phase delta connection without Neutral wire (3x 30A) 50/60 Hz
Compressed air	Oil free (class 1 according to ISO 8573-1 2010), 160 l/min compressor with 50 l barrel @6bar
SYSTEM INTEGRATION RIP/WORKFLOW SOFTWARE	

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

