



COLORADO 1650 PRINTER

The gel advantage



Colorado 1650 printer

SMART CHANGE STARTS HERE.

DISCOVER A NEW WORLD

The introduction of Canon UVgel technology, and its manifestation in the Colorado 1640 printer from Canon, set new standards in large format roll-to-roll automation and productivity. In developing Canon UVgel, the objective was to harness the strengths of traditional roll-to-roll printing technologies while eliminating their respective limitations and, ultimately, to enable print service providers to be more productive and cost-effective with their large format roll printing applications.

Print service providers around the globe have come to rely on this groundbreaking technology platform, and we seek to help them serve their customers in even more ways. Opening doors for new experiences with eye-catching smooth gloss or rich velvety matte output—all at the push of a button. Our focus on helping print service providers resulted in a printer that allows you to expand your opportunities by giving you greater creative control over look and feel. With your own Colorado series printer, you can give your customers what they need while improving your bottom line. Rely on instant-dry prints on a wide range of materials thanks to market-proven Canon UVgel technology, unattended production, and breakthrough productivity.

Always meet challenging customer requests with "yes, of course."



The Colorado Series

The Colorado Series 64" roll-to-roll printers are powered by the patented Canon UVgel technology. Produce scratch-resistant, odorless prints that require no drying time and enjoy the rich, colorful, razor-sharp images and impressive application range that are the hallmarks of the gel advantage.

The Colorado series of printers is designed with your business needs in mind, with print speeds that help you smoothly manage peak periods, improve profitability—thanks to reduced ink usage—and provide premium print quality on even the most basic media. Unprecedented levels of automation reduce the overhead from routine tasks such as media loading and daily maintenance, and free up your operators to focus on what really matters.

- Breakthrough productivity to meet today's short turnaround times with ease.
- Never-seen-before automation for nonstop printing without babysitting.
- Low cost of operation to maximize profitability.
- Wide application range for addressing a broad range of customer needs.
- Robust, industrial production platform for peace of mind.
- Industry-leading color consistency and dimensional stability.



COLORADO 1650 PRINTER

The flexible choice

The Colorado 1650 printer offers a truly impressive application range thanks to two new innovative technologies: the more flexible and stretchable formulation of the Canon UVgel 460 inks and the ingenious FLXfinish technology. The new inks provide excellent image stability, even when folded, bent, or wrapped. And with the FLXfinish technology, you can print your applications with either a beautiful glossy finish or a luxurious matte finish, independent of media type, expanding the range of your expression. Think of designer wallpaper, stunning decals, luxurious soft signage, and frontlits and backlits with the deepest black that make people stop and take notice.



GAME-CHANGING TECHNOLOGIES

The Colorado series is built from the ground up to provide print service providers with the ultimate worry-free experience. Relieve your operators from daily maintenance through unprecedented automation. Have the ability to give your customers whatever they need, through a wide application range, impressive quality, and a cost of ownership that opens up new business opportunities.

The gel advantage

Canon UVgel technology

Canon UVgel technology is at the heart of the Colorado series of printers—a unique print-then-cure process using UVgel inks and UV LED curing. These inks form an ultra-thin, extremely durable layer on top of the media.



The results:

- Excellent color gamut, color depth, and lightfastness.
- Low-odor prints, important for indoor usage.
- No drying time, so no waiting before finishing.
- High printing speeds of up to 1,709 ft.²/hr.
- Low temperature, low energy.
- UV LED curing, enabling usage of heat-sensitive media.
- Robust prints on a wide range of media.

Then there is the true gel advantage. The gel droplets remain stable on the media, with minimal dot gain, making it possible to deposit more ink in fewer passes. The result is more efficient ink usage.



The Canon UVgel ink provides a durable, scratch-resistant layer that needs no further protection for most applications. For the application range of the Colorado 1650 printer, the Canon UVgel 460 inks are developed to offer additional elasticity and flexibility.

This provides even better performance when prints need to be folded, creased, wrapped, or stretched on a frame. It is ideal for applications such as floor decals in high-traffic areas.

The finishing touch

FLXfinish technology from Canon

Your applications can truly be seen for what they are if they have the right finish. Premium wallpaper can look more luxurious with a lovely deep matte finish. Photos reveal their true color depth and emotional impact with smooth, mirror-like gloss. With FLXfinish technology from Canon, you can give any of your applications a gloss or matte finish without the need for special inks or media.



Canon UVgel customers already appreciate a vibrant gloss finish across a wide range of applications. The matte option offers a brilliant new range of applications—even on porous media such as uncoated plain paper, the gel inks stay on top. As a result, the Colorado 1650 printer can produce rich matte prints that offer a wide color gamut while maintaining crisp details.

Smart use of the Colorado 1650 printer's UV LED curing lights provides the basis for this flexibility. Full curing happens at the end of the printing process, but the stage is set for the finishing touch just after jetting the Canon UVgel inks. For applications with a matte finish or when using porous media, a brief flash of UV light pins the UVgel droplets in place immediately after jetting, freezing the shape of every drop of ink. This results in a rough surface at the micro level, providing the characteristic velvety-matte finish. For a glossy finish, the droplets get a little more time to settle into a smooth, even layer.

HIGHLIGHTS



1

FLXFINISH TECHNOLOGY — MATTE OR GLOSS FINISH WITHOUT CHANGING INK OR PAPER

An innovative curing strategy results in two distinct finishes: shiny gloss or velvety matte.



2

REDUCE INK USAGE

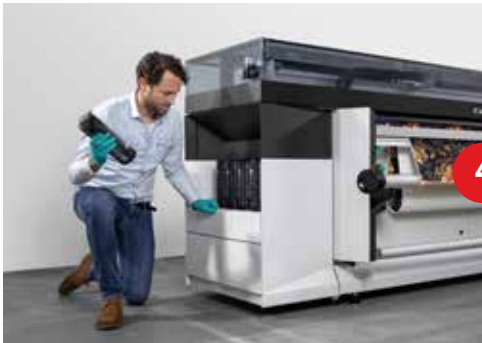
Canon UVgel inks form a thin layer on top of the media. This requires less ink than a traditional inkjet ink would to produce vibrant colors, which soak into the media.



3

UV CURING

Instantly dry prints with UV LED lights; avoid the risk of media distortion and enable immediate finishing.



4

REFILL INKS WHILE PRINTING

Large 1-liter ink bottles and a 2.5-liter ink reservoir allow operators to refill ink while printing at a time that is convenient for them.





PAINT NOZZLE MONITORING

The nozzles are continuously monitored with Canon's PAIN (Piezo Acoustic Integrated Nozzle Technology) and corrected if needed. Gain maximum confidence for unattended printing.



DOUBLE-SIDED PRINTING

Make double-sided prints easily and without hassle, for example, large outdoor banners or Point-of-Purchase (POP) displays that are visible from both sides.



ROLL WINDING MODULE

The automated roll winder module increases the ease of use of roll-to-roll systems and reduces errors.



TWO MEDIA ROLLS WITH ONLINE SWITCHING AND AUTOMATED MEDIA FEED

Automatic media feed helps eliminate human error and speeds up your productivity. Switching media rolls does not require operator intervention, leaving your operators free to focus on business-relevant activities.



PSO AND PSI PRINTING

Print on media that is wound either print side out or print side in for maximum media flexibility and specific customer requirements.



INSPIRING YOUR CREATIVITY

What would you do with a machine that supports your creative freedom like the Colorado series? Let your imagination run wild with these examples.

Deep matte designer wallpaper

The highest quality wallpaper has a deep matte finish. With Canon's FLXfinish technology, you can increase the perceived value of your wall decoration with the push of a button.



Glossy, smooth photo wallpaper

Photo wallpaper, on the other hand, looks best with a high-gloss finish that makes the colors pop. Give your customers realistic photo images that inspire.



Neatly folded canvas prints

Produce gallery-quality canvas prints with perfect creases thanks to the elasticity of the Colorado 1650 printer's Canon UVgel inks.



Eye-catching frontlits and backlits

Stop passersby in their tracks with vibrant frontlit or backlit displays. UVgel technology offers rich colors, elegant matte, and great blocking power.



Stunning double-sided banners

Help lower your operational costs and increase your margins with accurate and easy to produce double-sided banners, for indoor or outdoor use.



Gorgeous soft signage

Soft signage is a premium product that requires the perfect look without special treatment. With the Colorado 1650 printer's Canon UVgel inks, your products can take a beating during transport and still look great at the end.



Jaw-dropping pop posters

Nothing draws attention like a huge poster print. Single-sided, double-sided, it is all possible with the Colorado Series. And with the scratch-resistant Canon UVgel finish, these are investments that last and last.



Decals that stay like new

Produce scratch-resistant, water-resistant, and even graffiti-resistant decals that stand up to serious abuse without lamination. Ideal for floor graphics, wall decals, and vehicle graphics that hold up to washing.



Profitable, durable banners

Turn commodity jobs into high-margin opportunities with high productivity, increased ink savings, and unattended printing. Provide banners that are excellent quality, scratch resistant, and above all, economical.



Advanced, self-aware
piezoelectric printhead technology

Easy-to-use touchpad interface

Colorado 1650

PRINTING

Printing method

Canon UVgel piezoelectric inkjet

Gloss printing modes

Max speed: 1,709 ft.²/hr. (159 m²/hr.)
High speed: 1,229 ft.²/hr. (114 m²/hr.)
Speed: 861 ft.²/hr. (80 m²/hr.)
Production: 610 ft.²/hr. (57 m²/hr.)
High quality: 427 ft.²/hr. (40 m²/hr.)
Superior: 290 ft.²/hr. (27 m²/hr.)
Specialty: 222 ft.²/hr. (21 m²/hr.)

Matte printing modes

High speed: 495 ft.²/hr. (46 m²/hr.)
Speed: 409 ft.²/hr. (38 m²/hr.)
Production: 333 ft.²/hr. (31 m²/hr.)
Quality: 290 ft.²/hr. (27 m²/hr.)
Specialty: 215 ft.²/hr. (20 m²/hr.)
Backlit: 215 ft.²/hr. (20 m²/hr.)
Backlit density: 107 ft.²/hr. (10 m²/hr.)

Print resolution

Up to 1,800 dpi

Ink types

Canon UVgel 460 ink, CMYK (1-liter bottles)

Ink color

CMYK

Ink packaging

2 x 1-liter ink bottle
Ink reservoir can accommodate up to 2.5 liters per ink color

Printheads

Canon UVgel 415 printheads (two per color)

Automatic maintenance

PAINT constantly monitors and compensates for nozzle failures that can occur during printing
Automatic maintenance performed in seconds, daily
Refill ink while printing

Curing

UV LED with FLXfinish, instant dry, low temperature



MEDIA	
Roll width	Up to 64" (1,625 mm)
Print margin	0.21" (5.3 mm)*
Roll weight	Up to 110 lb. (50 kg)
Roll diameter	Up to 8.7" (220 mm)
Media thickness	Up to 0.03" (0.8 mm)
Number of input rolls	2 rolls in PSO mode / 1 roll in PSI mode Automatic roll feeding and switching
Input roll feeding	Compatible with rolls that are PSO or PSI Double-sided printing, leading edge support for flexible media
TECHNOLOGIES	
Canon UVgel technology	Instant pinning and dot gain control Low-temperature curing, suitable for thin and heat-sensitive media High-precision color matching and consistency Instantly dry
Canon FLXfinish technology	Gives you the choice between gloss or matte output on both smooth and structured media Enables you to print on porous and uncoated materials
SIZE AND WEIGHT	
Printer dimensions (W x D x H)	119" x 43" x 52" (3,022 x 1,093 x 1,300 mm)
Printer weight	1,631 lb. (740 kg)
SOFTWARE	
Supported RIPs	ONYX® Thrive™, Caldera, and API for third-party RIP vendors

* Margin 0.43" when Media Step Control is enabled (recommended for print modes up to 430 ft.²/hr. for optimized output quality)