

F-SERIES

Unique Design | Versatility | Impressive Print Results



IF-SERIES



Looking for a high-performance large format UV printer that prints on virtually any material?

Qres Technologies presents a new family of large format UV printers delivering exceptional productivity and quality. With a modular approach, Qres Technologies offers its clients the highly configurable F-Series product family that suits all your printing needs exactly how you want it. All our F-Series printers are made in Europe with high quality components and to exacting standards. Adding options will increase speed, colours and flexibility.

A solution for every production speed

The F-Series family is available in 3 different flatbed table sizes and comes in 2 different speed versions. With the factory or field upgradable double head option, customers are able to double the print speed up to a production rate of close to 100 m2/hour.

| Print heads and configuration

The F-Series printers are equipped with high quality inkjet print heads. Unparalleled sharpness and print fidelity is achieved using a unique wave form. Print resolutions up to 2880 dpi eliminate inkjet grain, producing smooth quartertones and photographic quality. The F-Series HS version is fitted with the latest generation of inkjet print heads delivering higher productivity due to its high performance.

Applications

Whatever product you are printing on, rigid or flexible material, corrugated or selfadhesive, wood, glass, metal or even stone, our highly adhesive and UV light resistant inks have a wool scale qualification above 7 and are applicable for indoor or outdoor use.

Material thickness

The solid flatbed construction of the F-Series allows you to print on any flexible or rigid substrate up to a maximum thickness of 50 mm which can be extended with the Bridge Lift option up to 300 mm.

Ink for high quality print

Specially developed Qres Technologies inks achieve high quality print results. The Qres Technologies UV-inks are tested and qualified with a 7+ on the wool scale. In addition to UV resistance, the Qres Technologies UV-inks have extremely high adhesion, low odor and a large color gamut. The large 3 litre reservoirs are refilled by pouring in bulk ink, making ink consumption as economical as possible.



Irregular printable surface

The F-Series printers have been developed to deliver outstanding print quality when printing on irregular material. In addition to conventional graphics substrates, many of the Qres Technologies customers print with the F-Series on metal or glass and also on irregular wood, shaped plastic, corrugated carton and even stone, without compromising on

Standard CMYK

The standard printer is equipped with a single row of CMYK print heads plus the possibility to choose 2 extra colours, i.e. white, varnish or a spot colour. In case double speed is needed, the user can ask for an additional print head row.

| Adjustable curing power and Lamp-shutters

The UV curing power is electronically controlled and the lamps are equipped with shutters to provide advanced curing options such as gloss mode, delayed curing and low heat curing to optimize the curing mode for each application.

Scalable vacuum system with multiple zones

The F-Series UV large format printers are engineered with 4 independent vacuum zones. By using multiple zones, the vacuum can be adjusted to the size and type of substrate, including rigid or flexible material. The external vacuum connection makes it possible to choose a high or medium power vacuum turbine of choice, which can be located either inside or outside the print room.

Anti-static control

With a built-in anti-static bar the F-Series printers are equipped to eliminate static build up on some types of material which can disturb the ink drops and degrade print sharpness. The anti-static control function is standard and makes static free production possible.

Software

Versatility and ease of operation, together with an intuitive control system are the main benefits of the Qpro print software. The Qpro software displays the basic system data including the print head temperatures, UV lamps status, ink levels, production status of the print job or statistical data about ink consumption. In addition to the Qpro print software, all F-Series printers come with Qrip software which can process and colour calibrate any standard image file. Caldera GrandRIP+ V10 software and Colorgate Productionserver 9 are offered as optional for all of the F-Series printers.









Options

Our innovative development approach has resulted in an exceptional UV printer with an impressive range of options. Due to the unique design of F-Series, its configuration can be changed and upgraded to match the current needs of your business. All offered options can be factory ordered or added any time later. The F-Series is the best choice for those who are looking for a high quality printer that prints on almost any material, as well as for professionals in the printing industry who need an ultra-fast printer that can to be tailored exactly to their needs. With Qres Technologies we will build your printer to the perfect configuration.

Bridge Lift

One of the outstanding features of the F-Series is the Bridge Lift option that allows an expanded variety of materials and objects to be printed. The scan bridge is equipped with a motorized mechanism that can raise the print carriage up to 250 mm of additional clearance. With this option, users can print on objects with a height of up to 300 mm. Imagine printing on boxes, furniture, product packaging, cookware, and many other industrial printing applications.



Extra colours

In its standard configuration, F-Series printers come with 4 print heads (cyan, magenta, yellow and black). Two additional print heads can be ordered, typically used for white, spot colours or varnish.

Higher production with the double print head option

An additional extra row of print heads can be factory ordered or is field upgradable afterwards. The Qres double print head option doubles the production speed. Not sure if you need the super high speed? No worries, just start with the standard unit and upgrade later. Your printer can get up to 12 print heads at any time.

Crash Sensors

The F-Series can be equipped with a technology to detect obstacles and immediately brake the print carriage motion. Crash sensors can prevent the damage of print heads, UV lamps and other components of the print carriage as well as protecting valuable printing substrates.

| Fast material changes with tandem operation

When needed, independent loading from front and backsides is possible with the tandem option. The tandem option enables the operator to load on one side of the printer while printing on the other side of the table. This option makes possible to operate the printer without additional material load and unload time

Scalable vacuum

Depending on the application, it is sometimes necessary to use a higher vacuum power to pull warped or porous material flat. Customers can decide to supply their own vacuum turbine or choose from the Qres 3 or 4 kW vacuum turbines.











| Printing speed in m ² /h | F160 F160L | F160 HS F160L HS | F200 | F200 HS |
|-------------------------------------|--------------|--------------------|------|---------|
| High Definition mode | 23 | 32 | 25 | 36 |
| Quality mode | 32 | 48 | 36 | 60 |
| Production mode | 48 | 65 | 54 | 80 |
| Express mode | 65 | 96 | 72 | 120 |
| Draft mode | 97 | 202 | 108 | 240 |

Qres Technologies is producing UV inkjet systems for the Graphic & Signage and Industrial retrofit market. With a best-in-class customer support organization and a growing installation base, Qres Technologies is delivering reliable and affordable UV Inkjet systems for the various markets. Our philosophy is to offer our customers' excellent quality, reliability and high standards accompanied with professional service and support. Our team enables us to develop and deliver a unique individual approach to our customers and to be highly flexible in meeting our customer's requirements both in product and customer support.









F-SERIES



| Technical Specifications

Technology

| Print technology | Piezo drop on demand ink-jet |
|-----------------------------|---|
| Print heads | Maximum 12 print heads |
| Drop volume | 9 pL |
| Standard configuration | Single row CMYK print heads |
| Optional ink channels | Up to 2 additional ink channels (White, Varnish, spot colours) |
| Optional 2nd print head row | Each ink channel can be extended (CMYK, White, Varnish, spot colours) |
| Addressable resolution | 360 dpi (F160 F160L F200) and 1440x720 dpi (F160 HS F160L HS F200 HS) |
| Print resolution | Up to 2880 dpi (typically 1440 dpi) |
| Ink curing system | Air cooled UV lamps |

| Media / Ink

| Ink | Qres Technologies high adhesion and low odor UV curable inks |
|---------------|--|
| Ink reservoir | 3 liter bulk ink tank with easy access for refill |
| Media types | Any flexible or rigid material including paper, vinyl, plastic, glass, wood, metal, stone, laminate, ceramics, rubber etc. |

| Print area

| F160 (and HS version) | 1.65 m X 2.55 m |
|-------------------------|--|
| F160L (and HS version) | 1.65 m X 3.25 m |
| F200 (and HS version) | 2.05 m X 3.25 m |
| Maximum media thickness | 50mm (2in) + optional 250 mm (9.8 in) with the Bridge Lift |
| Maximum media weight | 200 kg (440 lb) |

| Special features

| Adjustable curing | Lamp power continuously adjustable (50% - 100%) |
|----------------------------|--|
| Lamp-shutters | Dynamic operation during printing |
| Anti-static control | Anti-static bar eliminates static build up on media |
| Vacuum system | 4 or 8 independently controlled vacuum zones |
| External vacuum connection | Allowing to locate vacuum turbine externally or inside the printer |
| Cleaning station | Full access cleaning of print heads under bright illumination |

Options

| Bridge Lift | Increasing media thickness up to 300 mm |
|---------------------------|--|
| Crash sensor | Preventing the carriage from coalitions |
| Ink reservoir | 3 liter bulk ink container |
| Software | Caldera GrandRip V10 or ColorGATE Productionserver 9 |
| Double head configuration | Double CMYK heads, White, Varnish, spot colours |
| Tandem vacuum table | Independent loading from front and back sides |
| High power vacuum turbine | 3 and 4.4 kW version available |
| | |

| User interface

| Operating system | Windows 7, 8 or Windows 10 |
|---------------------------------|--|
| Qpro print software | Operator software (Included with the printer) |
| Qrip software | Basic RIP software (Included with the printer) |
| Optional 3rd party RIP software | Caldera GrandRip V10 or ColorGATE Productionserver 9 |
| Image formats | PDF, TIFF, JPEG, EPS |
| | |

| Physical Specifications

| F160 (and HS version) | 3450 mm X 3800 mm X 1300 mm (weight 1000 KG, 2205 lb) |
|------------------------------|---|
| F160L (and HS version) | 3450 mm X 4500 mm X 1300 mm (weight 1100 KG, 2500 lb) |
| F200 (and HS version) | 3850 mm X 4500 mm X 1300 mm (weight 1250 KG, 2850 lb) |
| Table height | 95 cm |
| Electrical requirements | 400 V, 50 Hz, 19 Amps, max 7.6 kW |
| Environmental specifications | Temperature 18 - 26°C relative humidity 30 - 70% dust free area |

Product specifications are subject to change without notice.

Qres Technologies s.r.o.

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