

G210-F3 Series Inline Conformal Coating System

A family of 3-axis inline coating configurations with panoramic vision and image-based programming. Choose the valve arrangement and coating travel for the board layout, component access and keep-out areas instead of treating all F3 variants as the same machine.



Selection highlights

- Four documented F3 valve arrangements
- Panoramic positioning with a 20 MP camera
- Image-based and offline programming

Applications to evaluate

- Selective coating of PCB assemblies with defined keep-out zones
- Mixed PCB production with program-based changeover
- Protective coating processes for control boards and power electronics after material qualification

How the configuration supports your process

Panoramic board positioning

Feature-matching vision locates the board and supports image-based path definition. Board features, fixtures and coating boundaries should be included in the application review.

Choose the correct F3 variant

The base F3 uses two valves in line. F3A offers adjustable dual-valve spacing; F3B and F3C use four-valve layouts. Their available travel differs, so select the variant against the actual coating path.

Connect production information

The documentation lists board identification, program selection and production statistics. Network protocols and customized MES integration should be specified as part of the delivered configuration.

G210-F3 Series | Technical reference

Values below are drawn from the product documentation. Confirm the ordered configuration and installation specification before purchase.

Parameter	Documented configuration / value
Motion configuration	3-axis
Installation	Inline rail conveyor integration
F3 coating travel (X × Y × Z)	450 × 450 × 100 mm
F3A / F3B coating travel	200 × 450 × 100 mm
F3C coating travel	200 × 440 × 100 mm
F3 valve arrangement	Two valves in line
F3A valve arrangement	Adjustable dual-valve spacing
F3B valve arrangement	Four valves in line; tilt optional
F3C valve arrangement	Four valves, front/rear arrangement; front-valve tilt optional
Documented component clearance	90 mm above and below conveyor plane; verify fixture and valve access
PCB edge clearance	≥4 mm
Coating width per pass	2-30 mm, dependent on valve
Conveyor height	900 ±40 mm
Conveyor speed	2-13 m/min
Vision camera / lens	20 MP industrial camera / 16 mm FA lens
Programming	Image-based and offline
Power supply	AC 220 V, 10 A, 50 Hz
Compressed air	0.4-0.7 MPa
Exhaust requirement	15 m³/min in supplied documentation; confirm installation specification
Approximate weight	650 kg
Repeatability	±0.02 mm; confirm test conditions

Repeatability is specified as ±0.02 mm with the unit confirmed by JCX; agree the measurement and acceptance conditions.

Reference: <https://www.visee-tech.com/product-item-23.html>

Prepared from supplied product documentation; this selection brief does not replace the agreed quotation or acceptance specification.

Plan your G210-F3 Series configuration

Base configuration and options

The F3 family uses 3-axis motion and panoramic vision. Valve arrangements and usable travel are specific to F3, F3A, F3B and F3C; the ordered variant must be stated explicitly.

- Post-coating image storage
- Barcode reading
- Bottom return conveyor
- Coating presence/absence inspection
- Tilt mechanisms on the applicable four-valve configurations
- Customized MES and production-data integration

Installation and project inputs

Plan extraction, compressed air, power and material handling before installation. Confirm the machine envelope for the selected variant and ensure adequate clearance for loading, cleaning and maintenance. Define coating thickness, keep-out boundaries and curing conditions through application evaluation.

Common selection questions

Does every F3 variant offer 450 × 450 mm travel?

No. That travel is listed for the base F3. F3A and F3B list 200 × 450 mm, while F3C lists 200 × 440 mm, each with 100 mm Z travel.

Is coating inspection included?

Coating presence/absence inspection is listed as an option. Confirm the required detection scope; it should not be assumed to provide full thickness or defect measurement.

Discuss your application with JCX

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Product page: <https://jcx-smtmachine.com/product/g210-f3/>

Provide board dimensions, representative samples, materials where relevant, and your inspection or process acceptance criteria. Support, training and integration scope are agreed for each project.