

# Manage and maintain printing quality

Our Integrated Production System - Nexim collects information for the entire line and manages it to support making SMT processes smarter.

**FSF**  
FUJI Smart Factory



## No line stops for quality-related errors

FSF D-1 Option

Based on inspection result feedback from SPI machines, future printing problems such as solder volume deviations, misalignment, and smearing can be predicted before they occur. Adjustment of print conditions and cleaning are performed automatically, to constantly maintain high quality printing.

## Visualization of production conditions

FSF B-1 FSF B-3 FSF B-2 Option

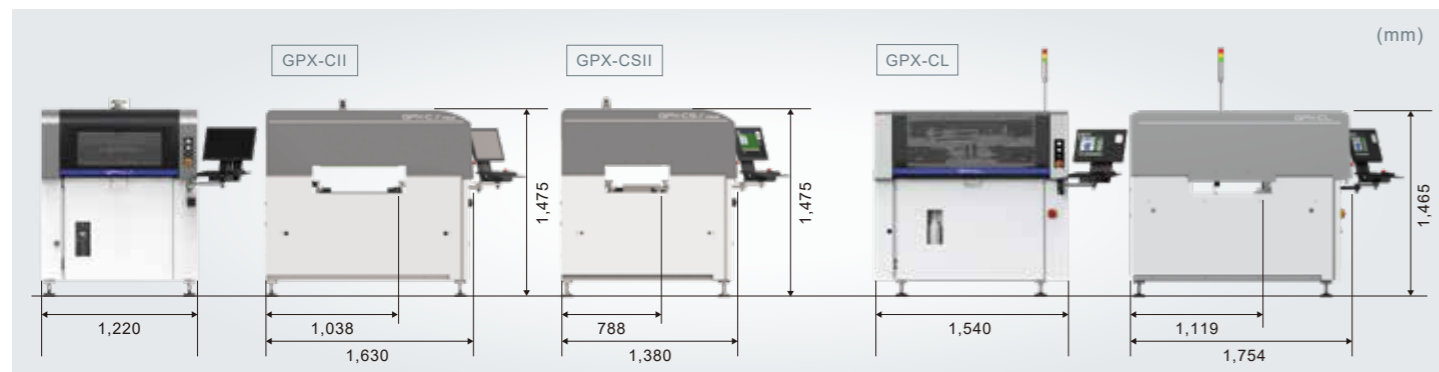
Monitor the status for the entire line in real time to find delays in planning and problems at an early stage. Maintain the printing quality by checking and analyzing the printing status and taking actions quickly.

## Batch automatic changeover for the entire line

FSF A-1 FSF A-2 Option

Frees operators from program changeover that had to be performed at each machine. Reduces changeover time and prevents mistakes in changing product types.

## External dimensions



## Specifications

Machine	GPX-CII	GPX-CSII	GPX-CL
Panel size (L x W)	48 x 48 mm to 610 x 610 mm	48 x 48 mm to 610 x 380 mm	80 x 80 mm to 850 x 610 mm
Squeegee speed	1 to 200 mm/sec		
Repeated alignment accuracy *1	±0.010 mm Cpk ≥ 2.0 (6σ)		±0.012 mm Cpk ≥ 2.0 (6σ)
Printing accuracy *1	±0.018 mm Cpk ≥ 2.0 (6σ)		±0.020 mm Cpk ≥ 2.0 (6σ)
Panel loading time *2	6.0 seconds		10.0 seconds
Printing pressure control	10 to 250N (Automatic control)		10 to 430N (Automatic control)
Metal mask frame size (L x W)	29 x 29 inch, 750 x 750 mm, 750 x 864 mm, Adjustable (550 to 750 mm x 550 to 864 mm) *3	29 x 29 inch, 750 x 750 mm, Adjustable (550 to 750 mm x 550 to 864 mm) *3	1,050 x 864 mm, Adjustable (29 x 29 inch to 1,050 x 864 mm) *3
Power	Single phase AC220 V ±10% (50/60 Hz)		
Air	0.4 to 0.6 MPa		
Air consumption	50 L/min (ANR)		
Weight	1,300 kg	1,250 kg	1,450 kg

\*1 Measured under conditions at Fuji. \*2 Includes panel loading/unloading, mark reading, and screen correction. \*3 This is an option.

### Options

- |  |   |                      |                      |
|--|---|----------------------|----------------------|
| - Automatic supply of cup or syringe supplied solder | - Hybrid clamp mechanism *1                 | - SPI Closed Loop    | - Quick setup tool   |
| - 2D solder inspection (Searchlight)                 | - Internal temperature and humidity control | - Local verification | - Local traceability |
- \*1 This is an option on GPX-CII and GPX-CSII.



## Intelligent Screen Printer

GPX-CII

GPX-CSII

GPX-CL

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## High versatility for supporting a variety of panel sizes



**GPX-CII**

## Compactness that allows dual lane production



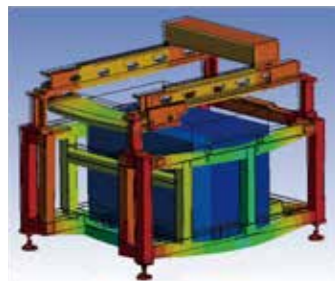
**GPX-CSII**

## Excellent capability that allows extra-large panel production



**GPX-CL**

### High accuracy for supporting fine patterns



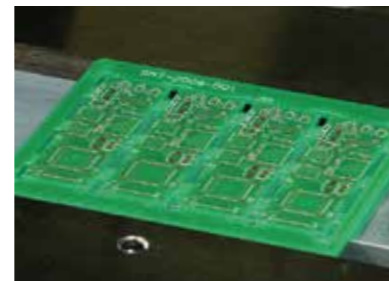
Consistent highly rigid machine design from the base to printing section enables high printing performance for supporting ultra fine patterns (0201 mm (008004")). Enables flexible production support for small to extra-large panels and the durability to maintain printing quality.

### High accuracy printing control



By having a load cell ready to use at the machine, printing pressure on the uneven sections of panels and masks can be monitored and controlled in real time. The optimum amount of solder filling is always achieved, even when using heavy or long squeegees with which it is difficult to fill evenly.

### Clamping mechanism supports various types of panels



Stable clamping is achieved by using the hybrid clamp mechanism, which allows users to select the optimum clamping method (side clamp/top clamp/edge clamp) according to the characteristics of the panel.

Available for GPX-CII and GPX-CSII as an option, standard for GPX-CL

### Accurate changeover



Backup pins are automatically and accurately positioned at the specified position. This reduces the work time for operators by automating changeover work and prevents defective panels due to human errors.

Available only for GPX-CII and GPX-CSII as an option

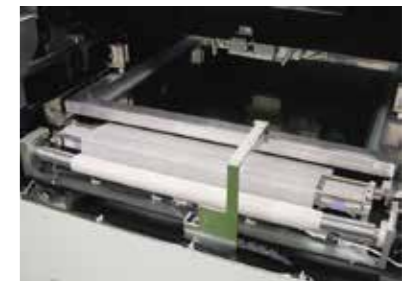
### Maintain an appropriate amount of solder



The amount of solder is detected, and solder is automatically supplied when necessary. This makes it possible to always print with the appropriate amount of solder, for stable print quality. Work can be completed without mistakes in a short time by using a cup and syringe as is.

Option

### Unique mechanism for efficient cleaning



With a combined wet and dry mechanism that keeps operation to a minimum, these printers significantly reduce cleaning time. The range in which cleaning fluid is applied is automatically adjusted to match the width of the panel. Only the amount of fluid needed is used, for effective cleaning.