

# Flash Memory Programmer PG-FP6

<https://www.renesas.com/pg-fp6>

## Standalone flash programmer best suitable for mass production and field programming.

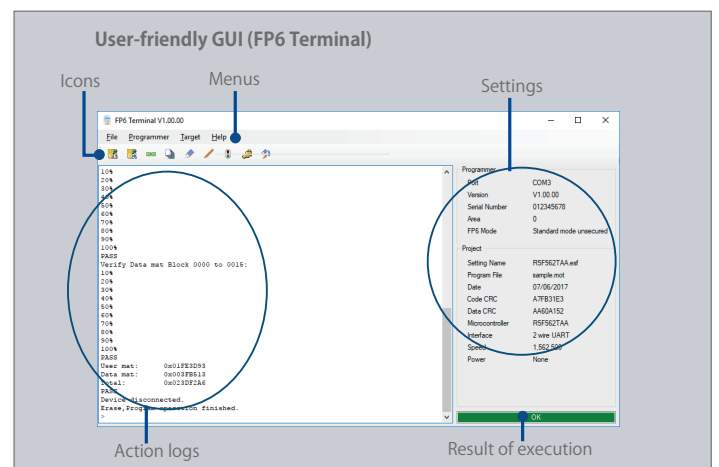
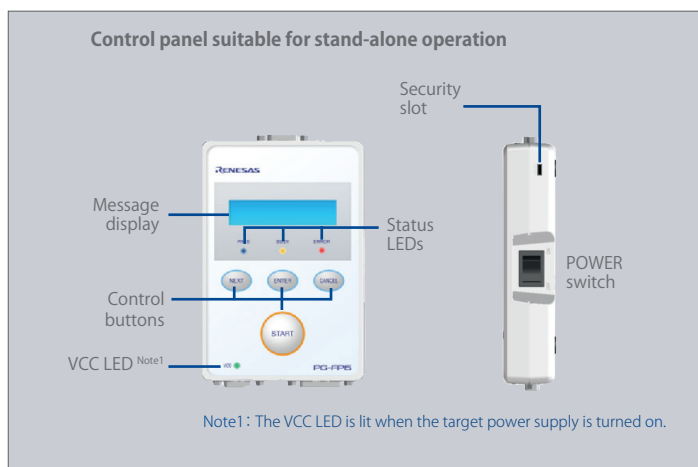
The PG-FP6 flash memory programmer is a tool that is used to erase, write and verify programs on a Renesas Electronics on-chip flash memory MCU on the user system. The PG-FP6 has made improvements on “accelerating programming speed” and “supporting more largescale flash memory” over the previous product, PG-FP5. The PG-FP6 product includes the "FP6 Terminal", a programming GUI that controls the PG-FP6 on PC.

### Main features

- Control panel suitable for **stand-alone** operation
- Simple and user-friendly GUI, FP6 Terminal
- Useful functions for production line: programming using by buttons and automatic programming
- Able to use USB power: convenient for **programming in the field**
- High-speed downloading of files for programming from a PC to the PG-FP6
- **High-speed programming** of MCUs by the PG-FP6 for reduced production times
- Support for high-volume programming by **gang programming** with the use of multiple PG-FP6s
- Code storage capacity with 256MB for large flash memory
- Security slot for theft prevention
- **High compatibility** with the predecessor



PG-FP6



### Support for high-volume programming by gang programming with the use of multiple PG-FP6s

#### Bundled control of multiple PG-FP6s

Programming GUI "FP6 Gang Programmer"

No.	Status	Pass / Error	Serial Number
1	Pass	5 / 0	00000004
2	Pass	5 / 0	11111111
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

GUI panel where you can see the states of programming and pass or failure for each of the PG-FP6s.

**Reduced times for high-volume programming**

You can handle simultaneous programming by controlling up to 12 PG-FP6s from a single PC.

**Easy setup**

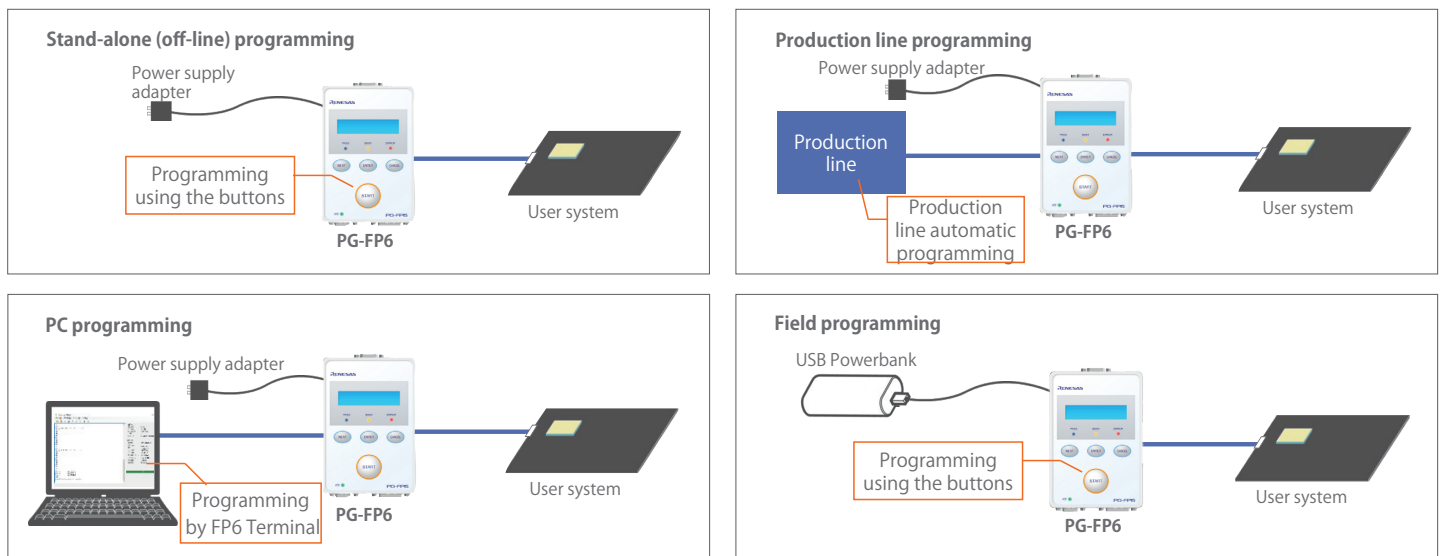
You can download setting files and program files as sets to multiple PG-FP6s at the same time.

## High compatibility with the predecessor

Designed with compatibility with the predecessor PG-FP5 in mind for smooth migration.

- Setup files created with the PG-FP5 can be imported.
- Support of PG-FP5-enabled MCUs (For the V850 and 78K family, only MCUs with single-power-supply flash memory is supported.)
- The same specifications of control buttons, message display, and status LEDs
- The same specification of connector layout
- Connectable to boards designed by using the PG-FP5
- Pursuing programming GUI compatibility

## PG-FP6 usage examples



## Functional comparison with the predecessor

Function	PG-FP6	PG-FP5
Product package contents	PG-FP6, GND cable, USB cable, Target cable, Power supply adapter	PG-FP5, GND cable, USB cable, Serial cable, Target cables of two sorts
External dimensions	140 × 90 × 30 mm (protruding parts excluded)	
Weight	Approximately 245 g	Approximately 230 g
Supported MCUs	<b>RA</b> , RL78, RX, RH850, <b>Renesas Synergy™</b> , <b>Some special-purpose ICs</b> , SuperH, R8C, 78K or V850 (singular power supply flash memory)	RL78, RX, RH850, SuperH, R8C, 78K or V850 (singular power supply / <b>dual power supply flash memory</b> )
Host interface	USB2.0 (USB1.1), Serial interface	USB2.0 (USB1.1), Serial interface
External control interface	Provided	Provided
Terminal control	Provided (command released)	Provided (command released)
Self-testing function	Provided	Provided
Target interface	CSI, CSI-H/S, UART, FINE	CSI, CSI-H/S, UART, FINE, <b>IIC, PORT</b>
VDD supply from the programmer	Provided	Provided
ROM code	Max. <b>256 MB</b> (divided by 8)	Max. 16 MB (divided by 8, <b>4, 2, or 1</b> )
MCU-specific information	<b>Parameter file for the PG-FP6(Included in FP6 Terminal)<sup>Note1</sup></b> Multiple files (max. 8) can be read.	Parameter file for the PG-FP5 Multiple files (max. 8) can be read.
MCU security settings, Main unit security settings, Simple mode, Bank mode	Provided	Provided
Single write operation by a programmer	The NEXT, ENTER, or CANCEL buttons are used. The START button is used for write operation.	The NEXT, ENTER, or CANCEL buttons are used. The START button is used for write operation.
Target cable	14-pin cable	14-pin cable, <b>16-pin cable</b>
Power	<b>Power supply adapter for the PG-FP6 (accessory) or USB power supply</b>	Power supply adapter for the PG-FP5 (sold separately)
Programming GUI	Programming GUI for the PG-FP6: FP6 Terminal <sup>Note1</sup>	Programming GUI for the PG-FP5 <sup>Note1</sup>
Operating environment	Windows® 10 (32-bit/64-bit version), Windows® 8.1 (32-bit/64-bit version), Windows® 7 (32-bit/64-bit version)	

Note1: The FP6 Terminal for the PG-FP6 includes parameter files and firmware, which are provided separately for the PG-FP5, and USB drivers.

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