RENESAS
BIG IDEAS FOR EVERY SPACE

Flash Memory Programmer
PG-FP6

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

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

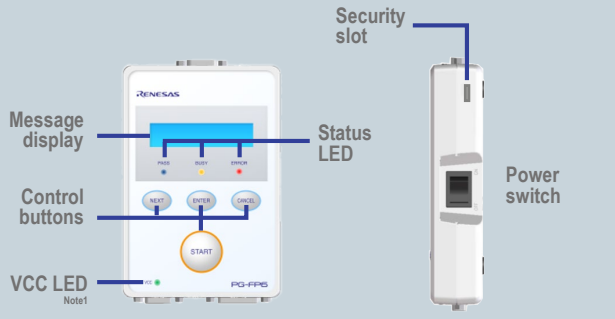
The PG-FP6 flash memory programmer is a tool that is used to erase, write and verify programs on a Renesas Electronics on-chip flash memory MCU on the user system. The PG-FP6 has made improvements on "accelerating programming speed" and "supporting more largescale flash memory" over the previous product, 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 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 • **Security Enhancement** against theft of program files and the PG-FP6 main unit • Security slot for theft prevention

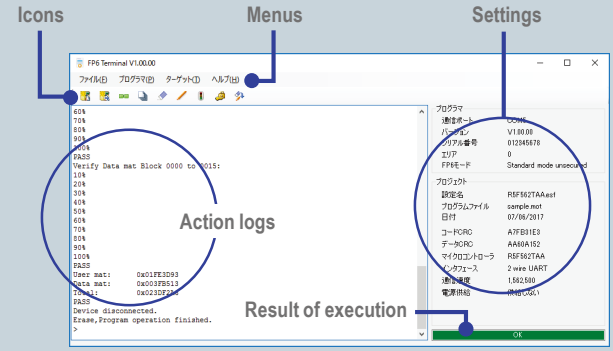
PG-FP6

Control panel suitable for stand-alone operation



Note1 : The VCC LED is lit when the target power supply is turned on.

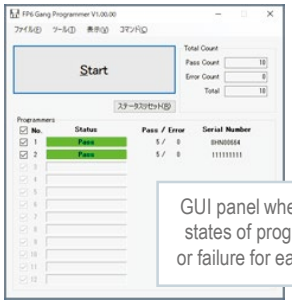
User-friendly GUI (FP6 Terminal)



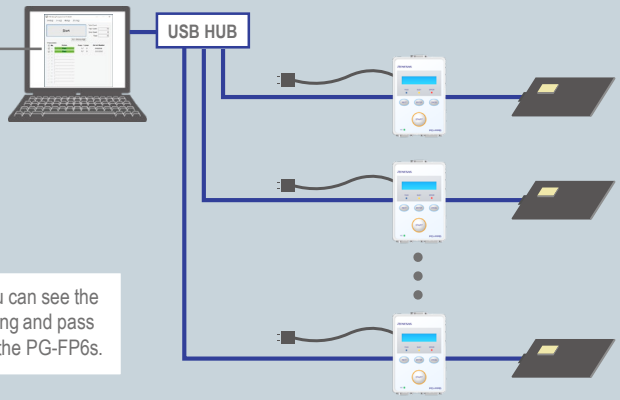
Support for high-volume programming by gang programming with the use of multiple PG-FP6s

Bundled control of multiple PG-FP6s

Programming GUI
"FP6 Gang Programmer"



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.

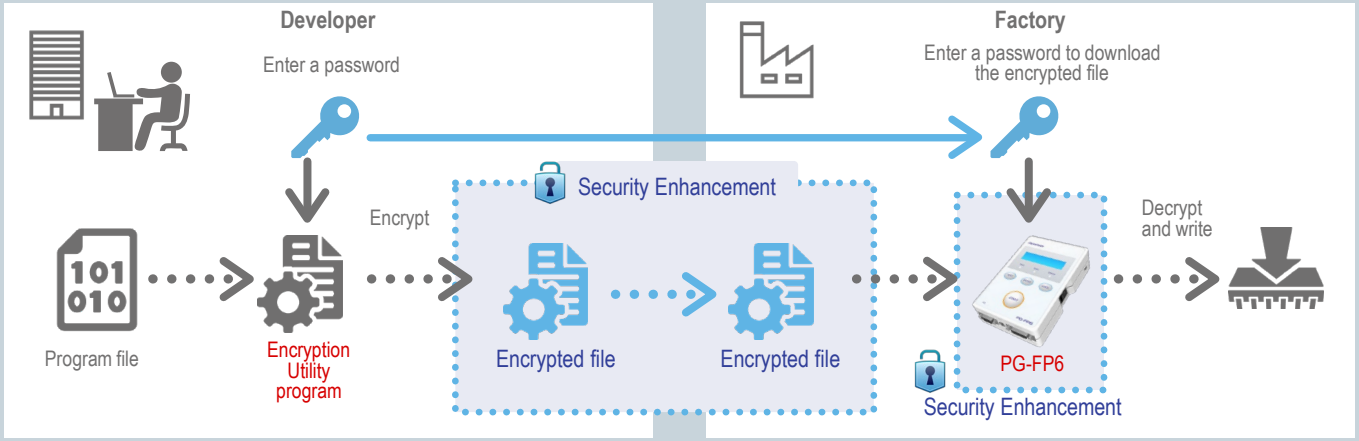
Security Enhancement against theft of program files and the PG-FP6 main unit

The following three features are added to enhance security against theft of program files and the PG-FP6 main unit.

1 Encryption of program files

2 Saving of encrypted files in the PG-FP6 main unit

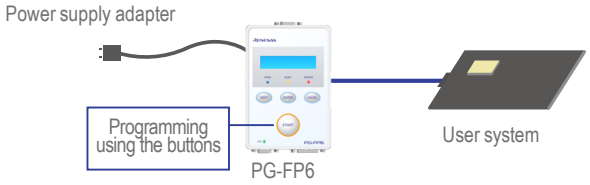
3 Simultaneous decryption and writing in the PG-FP6



*The program file encryption function can be run by using the encryption utility program (RPE.exe) from the command line. The file is among those installed by the FP6 Terminal installer.

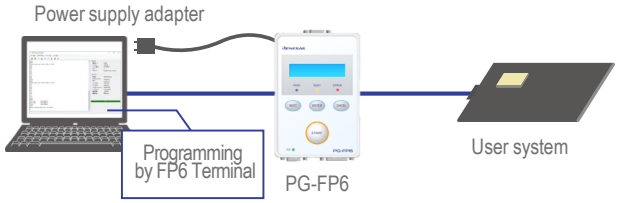
PG-FP6 usage examples

Stand-alone (off-line) programming

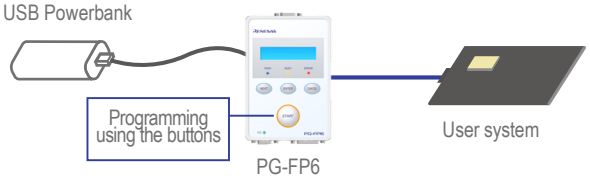


Production line programming

PC programming



Field programming



High compatibility with the predecessor

Designed with compatibility with the predecessor PG-FP5 in mind for smooth migration. For details, please visit the following website:
https://www.renesas.com/pg-fp6#compatibility

Specifications

Product package contents	PG-FP6, GND cable, USB cable, Target cable, Power supply adapter
External dimensions	140 × 90 × 30 mm (protruding parts excluded)
Weight	Approximately 245 g
Supported MCUs	RA, RE, RL78, RX, RH850, Renesas Synergy™, Some special-purpose ICs, SuperH, R8C, 78K or V850 (singular power supply flash memory)
Host interface	USB2.0(USB1.1),Serial interface
External control interface	Provided
Terminal control	Provided (command released)
Self-testing function	Provided
Target interface	CSI, CSI-H/S, UART, FINE
VDD supply from the programmer	Provided
ROM code	Max. 256 MB (divided by 8)
MCU-specific information	Parameter file for the PG-FP6 Note1 Multiple files (max. 8) can be read.
MCU security settings, Main unit security settings, Simple mode, Bank mode	Provided
Single write operation by a programmer	The NEXT, ENTER, or CANCEL buttons are used. The START button is used for write operation.
Target cable	14-pin cable
Power	Power supply adapter for the PG-FP6 (accessory) or USB power supply
Programming GUI	Programming GUI for the PG-FP6: FP6 Terminal Note1
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 includes parameter files, firmware and USB drivers.

Contact information
For further information on a product technology, to most up-to-date version of a document, or your nearest office, please visit **www.renesas.com/contact/**

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