

# GM Programmer Ver.2.0.1.0 Version-Up

Information you need to know before using the software (Essential reading)

## About GM Programmer

GM Programmer is software that can set GM1 Controller, edit programs and download programs.

## Caution

Be aware of the following points listed below.

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## System Requirements

Make sure that the computer on which you intend to run the software meets the minimum specifications listed below.

Item	Specifications
OS	Microsoft Windows 10 32bit/64bit Microsoft Windows 11 64bit *1
PC	PC with the below items installed <ul style="list-style-type: none"> <li>• Microsoft.NET Framework4.6.1 or more</li> <li>• Microsoft Visual C++ 2010 SP1 Redistributable Package (x86)</li> <li>• Microsoft Visual C++ 2010 SP1 Redistributable Package (x64)</li> <li>• Microsoft Visual C++ 2013 Redistributable Package (x86)</li> <li>• Microsoft Visual C++ 2013 Redistributable Package (x64)</li> <li>• Microsoft Visual C++ 2015 Update 3 Redistributable Package (x86)</li> <li>• Microsoft Visual C++ 2015 Update 3 Redistributable Package (x64)</li> </ul>
HDD	4GB or more
Memory	8GB or more
Communication Ports	LAN Port, USB 2.0 Port

\*1 Microsoft Windows 10 and Windows 11 are registered trademarks of Microsoft Corporation in the United States and/or other countries.

## How to Install

Double-click the setup.exe file in the unzipped folder to launch the installer.

The installation screen will show up. Please follow the instruction to finish the installation.

## GM Programmer Detailed Version-Up Information

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### Version-Up Information (Ver.1.6.2.0 to Ver. 2.0.1.0) (Jan 13, 2026 update)

- Updated the included firmware from Ver.1.6.0.1 to Ver.2.0.0.0.
- Updated CODESYS..

### Version-Up Information (Ver.1.6.1.0 to Ver. 1.6.2.0) (Jul 1, 2025 update)

- Updated the included firmware from Ver.1.6.0.0 to Ver.1.6.0.1

### Version-Up Information (Ver.1.5.1.0 to Ver. 1.6.1.0) (Jun 9, 2025 update)

- Updated the included firmware from Ver.1.5.0.0 to Ver.1.6.0.0
- Supported core dump function.
- Improved various UI displays.

### Version-Up Information (Ver.1.4.2.0 to Ver. 1.5.1.0) (November 25, 2024 update)

- Updated the included firmware from Ver.1.4.0.1 to Ver.1.5.0.0
- Added following models.
  - Serial Communication Unit
- Supported timing setting for source download.
- Supported symbol set function of symbol configuration.
- Improved instruction help function.
- Improved various UI displays.

### Version-Up Information (Ver.1.4.1.0 to Ver. 1.4.2.0) (May 13, 2024 update)

The following points have been upgraded.

- Updated the included firmware from Ver.1.4.0.0 to Ver.1.4.0.1.
- Added following CNC function.
  - G05/G10 Spline interpolation
  - Scara function
  - CAD data import function

■Corrected the following errors.

- SoftMotion Ramp type Sin<sup>2</sup> error
- Following the motion function block error
  - PMC\_Home
  - PMC\_ReadLatchPosition
  - PMC\_StopLatchPosition
- POU and folder cannot copy between projects.
- Improved various UI displays.

### Version-Up Information (Ver.1.3.4.0 to Ver. 1.4.1.0) (November 8, 2023 update)

The following points have been upgraded.

- Updated the included firmware from Ver.1.3.0.3 to Ver.1.4.0.0.
- Support Windows(R) 11 64bit.
- Expanded the maximum number of real axes for RTECH from 16 to 32 axes.
- Support star type for EtherCAT network topology.
- Support for enabling/disabling EtherCAT devices.
- Added MQTT client.
- Added DNS client.
- Added SNTP client.
- Added the project management function block.

- Added Extended Cam editor.
- Added Visualization function.

Corrected the following errors.

- Pin assignment settings are not saved correctly in PANATERM Lite for GM.
- Improved various UI displays.

### Version-Up Information (Ver.1.3.2.0 to Ver. 1.3.3.0) (February 1, 2023 update)

The following points have been upgraded.

- Updated the included firmware from Ver.1.3.0.1 to Ver.1.3.0.2.

#### GM1 Firmware Detailed Version-Up Information

Version-Up Information (Ver.1.3.0.1 to Ver. 1.3.0.2) (February 1, 2023 update)

Corrected the following errors.

- Fixed a bug in the CNC function.

### Version-Up Information (Ver.1.3.1.0 to Ver. 1.3.2.0) (September 26, 2022 update)

The following points have been upgraded.

Corrected the following errors.

- The motion task stops during error clear processing.
- Network settings may not be saved.
- The analog input/output settings may be not saved.
- Improved error judgment processing of PMC\_Home and PMC\_StopLatchPosition.

### Version-Up Information (Ver.1.2.2.0 to Ver. 1.3.1.0) (June 13, 2022 update)

The following points have been upgraded.

- Added OPC UA server.
- Added the communication to display units. (Codesys V3 communication)
- Added FTP server.
- Added the project management. (SD backup and restore operating GM1 device directly)
- Added following the motion function block.
  - SMC\_ChangeDynamicLimits
  - SMC\_ChangeGearingRatio
  - SMC\_SetMovementType
  - SMC\_SetRampType
  - SMC\_SetSoftwareLimits
  - SMC3\_ReinitDrive (also RTEK)
- Added following CNC function block.
  - SMC\_RoundPath
  - SMC\_SmoothPath
  - SMC\_TRAFO\_Bipod\_Arm
  - SMC\_GetMPParameters
  - SMC\_PreAcknowledgeMFunction
- Added following G code.
  - G50,G51,G52
- Added following basic function block.
  - Calculation of Average, Maximum and Minimum
  - Linear Transformation , Range Monitoring , Flicker Circuit
  - String operation using WSTRING character
- Added backup and restore of persistent variables by the recipe function.
- Added the recipe function block.
- Added the project archive.
- Added the menu customization function of the tool.
- Added the setting of whether to write the IP address.

Corrected the following errors.

- When the old project is converted to the new version project, some parameter settings in the expansion unit changed to the initial value.
- When the parameter is changed to S acceleration / deceleration in the pulse output unit, the value is not saved correctly.
- The parameter of the input time constant of the digital input unit and digital input / output unit is not saved.
- The parameter of the high-speed counter using 4 digits and more values cannot be set correctly in some OS.
- Improved various UI displays.

### Version-Up Information (Ver.1.2.1.0 to Ver. 1.2.2.0) (February 1, 2022 update)

The following points have been upgraded.

- Added following CNC function block.
  - SMC\_NCDDecoder
  - SMC\_CheckVelocities
  - SMC\_Interpolator
  - SMC\_TRAFO\_Polar
  - SMC\_TRAFOF\_Polar
  - SMC\_ControlAxisByPos
- Added following G code.  
G20,G36,G37,G53,G54,G55,G56
- Added the SD card recipe function
- Added following function.  
Data Type Conversion, Memory Operation, CRC Calculation
- Added following basic function block.  
Memory Operation

Corrected the following errors.

- When E point control using PG\_MoveRelative or PG\_MoveAbsolute is executed, Pulse Output Unit may stop suddenly.
- Even if you enter the parameters within the set range for Analog Input Unit, it may be displayed as out of the set range and you may not be able to set it.
- When the task interval of MotionTask is changed, the changed task interval is not reflected unless the screen of EtherCAT slave setting is displayed.
- Improved various UI displays.

### Version-Up Information (Ver.1.0.1.0 to Ver. 1.2.1.0) (October 13, 2021 update)

The following points have been upgraded.

- Added following models.
  - GM1 Controller EtherCAT type
  - Digital output Unit(PNP)
  - Digital I/O Unit (PNP)
  - Analog input Unit
  - Analog output Unit
  - Pulse output Unit
- Supported firmware update by GM Programmer (USB/LAN).
- Supported PID instructions(PD、PID、PID\_FIXCYCLE).
- Added following RTEX function block.
  - RTEX\_WriteCommand
  - RTEX\_ReadResponse
  - RTEX\_WriteEEPROM
  - RTEX\_DoAcyclicCommand
- Changed the maximum number of virtual axes to 20 regardless of the number of real axes.
- The operation mode of GM1 Controller RTEX type can be changed to RUN mode regardless of the running status of the MINAS.

Corrected the following errors.

- GM Programmer cannot be connected to GM1 Controller by USB in Windows 10(32bit).

- Changed pre-installed EDS file for FP-XH.
- The screen cannot be closed automatically in uninstallation while GM Programmer is running.
- The screen displayed in multi-display cannot be come back to main display after disconnecting it.
- Error message is displayed when the dialog of Function Block Guidance is restored after minimized.
- The display of the operand setting screen cannot be switched by operand button after maximizing Function Block Guidance dialog.
- Incorrect error No. is displayed in Status screen and System Data History screen.
- Occurred command value error(Err.27.4) when the servo is from off to on after making a home return in modulo setting.
- Failed clearing the multi-turn data by RTEX\_ClearAmpMultiTurnData.
- Incorrect stop position after executing PMC\_StopLatchPosition.
- Improvement of various UI displays.

## GM1 Firmware Detailed Version-Up Information

[Click here for GM Programmer Version-up Information](#)

### Version-Up Information (Ver.1.5.0.0 to Ver. 1.6.0.0) (Jun 9, 2025 update)

- Supported SD card log storage function.

Corrected the following errors.

- Fixed error in power off servo after RTEX Home return.
- Fixed unable to write by RTEX\_WriteAmpParameter.
- Fixed received data error for Serial communication unit.
- Fixed error processing of expansion units (Digital input / output unit, Analog input / output unit and Pulse output unit) .

### Version-Up Information (Ver.1.4.0.1 to Ver. 1.5.0.0) (November 25, 2024 update)

- Added following models.
  - Serial Communication Unit
- Added error clear per RTEX axis.
- Fixed vulnerability CVE-2023-6357, JNVNU#97256167.

### Version-Up Information (Ver.1.4.0.0 to Ver. 1.4.0.1) (April 15, 2024 update)

Corrected the following errors.

- RETAIN and PERSISTENT variables error.

### Version-Up Information (Ver.1.3.0.3 to Ver. 1.4.0.0) (November 8, 2023 update)

- Expanded the maximum number of real axes for RTEX from 16 to 32 axes.
- Added MQTT client.
- Added DNS client.
- Added SNTP client.
- Added the project management function block.

Corrected the following errors.

- Fixed FTP server timestamp information to local time display.
- Improved starting Controller if expansion units are connected.  
Fixed Digital input / output unit, Analog input / output unit and Pulse output unit too.

### Version-Up Information (Ver.1.3.0.2 to Ver. 1.3.0.3) (June 21, 2023 update)

Corrected the following errors.

- Starting Controller may fails only if expansion units are connected.

### Version-Up Information (Ver.1.3.0.1 to Ver. 1.3.0.2) (February 1, 2023 update)

Corrected the following errors.

- Fixed a bug in the CNC function.

### **Version-Up Information (Ver.1.3.0.0 to Ver. 1.3.0.1) (September 26, 2022 update)**

Corrected the following errors.

- The motion task stops during error clear processing.

### **Version-Up Information (Ver.1.2.0.0 to Ver. 1.3.0.0) (June 13, 2022 update)**

- Added OPC UA server.
- Added the communication to display units. (Codesys V3 communication)
- Added FTP server.
- Added the project management. (SD backup and restore operating GM1 device directly)
- Added the setting of whether to write the IP address.

### **Version-Up Information (Ver.1.0.1.0 to Ver. 1.2.0.0) (October 13, 2021 update)**

- Added following models.
  - GM1 Controller EtherCAT type
  - Digital output Unit(PNP)
  - Digital I/O Unit (PNP)
  - Analog input Unit
  - Analog output Unit
  - Pulse output Unit
- Supported firmware update by GM Programmer (USB/LAN).
- The operation mode of GM1 Controller RTEX type can be changed to RUN mode regardless of the running status of the MINAS.