

2502EN V1.0.4

IC-GRID X Series GX-CM111 Module User Manual



Table of Contents

1.	Introdu	action	. 3
2.	Produc	t Features	. 3
2.	Modul	e Specifications	. 6
	2.1	Electrical Specifications	. 6
	2.2	General Specifications	. 7
	2.3	Communication Module Specifications	. 8
3.	Modul	e Panel Introduction	. 9
	3.1	GX-CM111	. 9
4.	Modul	e Installation and Removal Instructions	10
	4.1	Installation	10
	4.2	Removal	.11
	4.3	Module Dimensions	12
5.	Modul	e Wiring Instructions	13
	5.1	Communication Module	13
6.	Parame	eter Setting and Configuration Instructions	14
	6.1	Product Assembly Configuration	14
	6.2	Coupler Parameter Description	15
	6.3	Factory Defaults	17
	6.4	Error Code Lookup	18
	6.5	Serial Communication Parameters	20
7.	Appen	dix I: i-Designer Instructions	34
	7.1	Installation	34
	7.2	UI Screen Description	36
	7.3	i-Designer Information Verification	41
	7.4	Language Settings	42
	7.5	COM Port Connection Settings	43
	7.6	Connection Setting Instructions	45



1. Introduction

The GX-CM111 Serial Communication Module for Plug-in I/O is compatible with GX Series couplers. With a variety of functional modules, it enables Modbus master-slave, serial communication. Compact and efficient, these modules are designed for straightforward data handling, fitting various serial communication needs across multiple applications.

2. Product Features

Multi-Protocol Support

Simplified system configuration, supporting standard industrial communication protocols including PROFINET, EtherCAT, EtherNetIP, and ModbusTCP when used with a coupler.

• Two Communication Interfaces

Offers interface options for RS485 and RS232.

- Supporting Two Communication Protocols
- Modbus RTU/ASCII
- Compact Design

Space-saving, compact structure.

Easy Diagnostics

Intuitive and clear channel status display for simplified monitoring and maintenance.

• Straightforward Configuration

Quick and easy module configuration.

• Convenient Installation

Designed for standard DIN 35 mm rail mounting with quick-connect terminals for fast and easy wiring.





1. THIS DEVICE IS FOR INDOOR USE ONLY, DON'T PUT OR USE IT IN HIGH TEMPERATURE AND HIGH MOISTURE ENVIRONMENT.

CET EQUIPEMENT EST DESTINE A UN USAGE INTERIEUR UNIQUEMENT NE PAS STOCKER OU UTILISER DANS UN ENVIRONNEMENT A HAUTE TEMPERATURE ET HAUTE HUMIDITE.

2. AVOID FALLING AND BUMPING OTHERWISE THE ELECTRICAL COMPONENTS WILL BE DAMAGED.

ÉVITEZ DE TOMBER ET DE VOUS ÉCRASER, SINON LES COMPOSANTS ÉLECTRIQUES SERONT ENDOMMAGÉS

3. DON'T TRY TO DISASSEMBLE OR OPEN THE COVER UNDER ANY CIRCUMSTANCE IN ORDER TO AVOID DANGER.

NE TENTEZ JAMAIS DE DEBALLER OU D'OUVRIR LE COUVERCLE POUR EVITER TOUT DANGER.

4. IF THE EQUIPMENT IS USED IN A MANNER NOT SPECIFIED BY THE MANUFACTURER, THE PROTECTION PROVIDED BY THE EQUIPMENT MAY BE IMPAIRED.

SI L'APPAREIL N'EST PAS UTILISE DE LA MANIERE INDIQUEE PAR LE FABRICANT, LA PROTECTION FOURNIE PAR L'APPAREIL PEUT ETRE ALTEREE.

5. THE INSTALLATION THAT THE SAFETY OF ANY SYSTEM INCORPORATING THE EQUIPMENT IS THE RESPONSIBILITY OF THE ASSEMBLER OF THE SYSTEM.

L'INSTALLATION DE TOUT SYSTÈME INTÉGRANT CET ÉQUIPEMENT EST LA RESPONSABILITÉ DU CONSTRUCTEUR DU SYSTÈME.

6. USE WITH COPPER CONDUCTORS ONLY. INPUT WIRING: MINIMUM 28 AWG, 85°C, OUTPUT WIRING: MINIMUM 28 AWG, 85°C

DESTINÉ À ÊTRE UTILISÉ AVEC DES CONDUCTEURS EN CUIVRE SEULEMENT. CABLAGE D'ENTREE: MINIMUM 28 AWG, 85 ° C. CABLAGE DE SORTIE: MINIMUM 28 AWG, 85 ° C.

7. FOR USE IN A CONTROLLED ENVIRONMENT. REFER TO MANUAL FOR ENVIRONMENTAL CONDITIONS.

POUR UN ENVIRONNEMENT CONTROLE. REPORTEZ-VOUS AU MANUEL DES CONDITIONS ENVIRONNEMENTALES.

8. DISCONNECT ALL SOURCES OF SUPPLY BEFORE SERVICING.

COUPER TOUTES LES SOURCES D'ALIMENTATION AVANT DE FAIRE L'ENTRETIEN ET LES RÉPARATIONS.

9. PROPER VENTILATION IS REQUIRED TO REDUCE THE RISK OF HAZARDOUS OR EXPLOSIVE GAS BUILDUP DURING INDOOR CHARGING. SEE OWNERS MANUAL.



UNE VENTILATION ADÉQUATE EST NÉCESSAIRE AFIN DE RÉDUIRE LES RISQUES D'ACCUMULATION DE GAZ DANGEREUX OU EXPLOSIFS DURANT LA RECHARGE À L'INTÉRIEUR. VOIR LE MANUEL D'ENTRETIEN.

10. PLEASE BE SURE TO USE CERTIFIED POWER SUPPLY WITH SELV OUTPUT OR CERTIFIED POWER SUPPLY PROVIDING DOUBLE INSULATION EVALUATED BY UL60950-1, UL 62368-1, OR UL61010-1 AND UL61010-2-201 STANDARDS.

VEUILLEZ VOUS ASSURER D'UTILISER UNE ALIMENTATION CERTIFIÉE AVEC SORTIE SELV OU UNE ALIMENTATION CERTIFIÉE OFFRANT UNE DOUBLE ISOLATION ÉVALUÉE PAR LES NORMES UL60950-1 OU UL 62368-1 OU UL61010-1 ET UL61010-2-201.



2. Module Specifications



2.1 Electrical Specifications

Electrical Specifications						
Serial	Working Voltage	24 VDC (-15%~+20%)				
Module	Working Current	Max. 130mA @ 5VDC				



2.2 General Specifications

General Specifications							
	Coupler	25 x 105 x 69mm					
Size (w x D x n)	I/O Module	12 x 105 x 69mm					
Weight	Coupler	80g					
weight	I/O Module	65g					
Operating Temperature	0 +60°C						
Storage Temperature	-25°C+85°C						
Relative Humidity	RH 95%, non-condensing						
Altitude Limit	< 2000m						
IP Protection Level	IP 20						
Pollution Degree	II						
Safety Certifications	CE						
Wire Gauge Range (IEC / UL)	$0.2 \text{mm}^2 \sim 1.5 \text{mm}^2 / \text{AWG } 24 \sim 16$						
Recommended Terminals	DN00510D DN00710D						



2.3 Communication Module Specifications

Serial Communication Specifications					
Number of Channels	3				
Communication Protocol	Modbus RTU Master / Slave				
Communication Mode	Modbus Master, Slave, Free Port				
Baud Rate Range	1200 to 115.2 kbps				
Signal Type	RS232, RS485				
Data Bits	7, 8				
Stop Bits	1, 2				
Parity Check	None, Odd, Even				
Character Interval	1.5T~200T, default 3.5T				
Response Timeout	Customizable, default 1000 ms				
Polling Interval	Customizable, default 100 ms				
Data Input Handling Mode	Retain last input value, clear input value				
Data Output Mode	Polling, data change				
Power-on Output Module Control Mode	Enable, disable				
Output Module Control	Enable, disable				
Output Module Control Mode	Polling (continuously active), rising-edge trigger (single activation)				
Slave ID	Customizable, default 1				
Slave Response Time	Customizable, default 50 ms				
Free-Transmission Communication Mode	Auto-report, listening mode				
System Indicators	1 Green LED(SP), 1 Red LED(AL)				
Channel Indicators	3 Green LEDs, 3 Red LEDs				



3. Module Panel Introduction

3.1 GX-CM111



Fig. 3.1 GX-CM111

NO.	Name	;	Description				
1	Signal Terr	minal	Input/output signal interface, plug-in terminal				
2	Channel S Indicate	tatus or	3 x Green LEDs, 3 x Red LEDs				
3	3 System Bus Interface		Interface f	Interface for communication and power supply			
Status Indicators							
Name	Label	Color	Status	Description			
	1A, 2A	Green	Flashing	Communication interface transmitting packets			
Communication	TX	Gitti	Off	No configuration or no packet transmission			
Indicator	RA	Red	On	Module communication error, packet error, or response timeout			
	RX	Keu	Off	Normal module communication			



4. Module Installation and Removal Instructions

4.1 Installation

Align each module unit's side with the direction indicated by the arrow, and snap it onto the upper side of the DIN rail.

Once each unit is positioned, the clip automatically locks onto the rail.



Figure 4.1 Module Installation Diagram

*Note: If the clip fails to engage, press the top of the clip to reset and secure it to the rail.



4.2 Removal

Use a screwdriver to pull down the metal hook on the bottom of each module unit. Following the reverse order of installation, remove each module unit from the DIN rail.



Figure 4.2 Module Removal Diagram



4.3 Module Dimensions

4.3.1. I/O and Functional Module Dimensions



Figure 4.4 I/O Module Dimension Diagram



5. Module Wiring Instructions

5.1 Communication Module



Figure 5.1 GX-CM111



6. Parameter Setting and Configuration Instructions

6.1 Product Assembly Configuration

As shown in the image below, product configuration primarily involves couplers and I/O modules.



Figure 6.1

Quantity Limit for Configuration

- 1. A maximum of 64 physical I/O modules can be configured on the coupler.
- 2. The coupler supports up to 64 modules in total, including both expanded virtual and physical modules.

Virtual Module Limitations

Currently, only GX-CM111 applications are supported. For expanded commands, the virtual module configuration limit is set to 32.



6.2 Coupler Parameter Description

Module Configuration	Module Settings				
	✓ 1-General Settings				
GX-CLTIU SP PROFNET AI22C AO22C AI22V AO22V	Module Slot	0			
A	Device Name	dinkle-pnio			
	Time Lock(ms)	0			
	✓ 2-Internet Settings				
	IP Address	192.168.1.20			
	Mask	255.255.255.0			
	Gateway	192.168.1.20			
	MAC	00:00:00:00:00			
	✓ 3-Module Information				
	Firmware Version	1.0.2.r			
	Hardware Version	X01			
	Product Serial Number	GX-CL11000000001			

Figure 6.2 Coupler Parameters

6.2.1 General Settings

- Module Slot: Slot number (position); fixed at 0 for the coupler.
- Device Name: Used for name recognition in Profinet network communication. Follow standard naming conventions for the settings.
- Reset Time: Defaults to 0 if not set, meaning the reset function is disabled. If the timeout parameter is set to 1000, it means that within 1 second, the module must exchange IO data with the host computer. If no data exchange occurs within this set time, the module will set the output channels to 0.

6.2.2 Network Settings

- IP Address: Can be configured in IPv4 network address format, with a default factory setting of 192.168.1.20.
- Subnet Mask: Configurable; default setting is 255.255.255.0.
- Default Gateway: Configurable; default setting is 19.168.1.20.
- Physical Address: Not configurable; MAC address is factory-set for network identification of different device modules.

6.2.3 Module Information

- Firmware Version: Current module firmware version
- Hardware Version: Module hardware design version
- Product Serial Number: Unique identifier for Daudin products

As shown in Figure 6.2, all parameters (except MAC) can be configured as needed. After completing the settings, proceed to upload the parameters as shown in Figure 6.3.





Figure 6.3 Upload Parameters



Before proceeding with relevant settings, the system operation must be paused.



6.3 Factory Defaults

Apart from setting parameters through i-Designer, users can also reset system parameters using the reset button located inside the side casing.

Press Time/Mode	Application Mode
Light Press (<6 seconds)	Module restart (RESET)
Long Press (>6 seconds)	Restore default parameters (Application Mode) ^{Note}

Note: When the user presses the reset button for more than six seconds, the SYS light will illuminate red. After releasing the button, the red light will flash, indicating that the default parameters have been restored.



Figure 6.5 System Reset Button



6.4 Error Code Lookup

Users can query system error information and identify timed-out physical modules via the error code module (virtual module).Once setup is complete, the error code module will automatically occupy the last three available slots. If no slots are available, the system will disregard it.

Error Code	Purpose	Length (Word)
System Error	System error information	2
Error Module (01-32)	Physical modules 1-32 triggering timeout	2
Error Module (33-64)	Physical modules 33-64 triggering timeout	2

System Error: System error log, 32-bit data ordered from HSB to LSB

Description	System Error [4 Byte]								
Description	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
System Error [3]	Reserved								
System Error [2]	Reserved							Err16	
System Error [1]	Err15 Err14 Err13 Err12 Err11 Err			Err10	Err9	Err8			
System Error [0]	Err7	Err6	Err5	Err4	Err3	Err2	Err1	Err0	

Err0: Reserved

Err1: Bit set to 1 (Coupler/IO module): Indicates the first boot, with no relevant data in memory

Err2: Bit set to 1 (Coupler/IO module): Indicates memory exceeds the planned size

Err3: Bit set to 1 (Coupler/IO module): Indicates a Checksum error

Err4: Bit set to 1 (Coupler/IO module): Indicates boot failure

Err5: Bit set to 1 (IO module): Indicates that the power is not supplied to the load side of the IO module

Err6: Bit set to 1 (IO module): Indicates IO module over-voltage/over-current

Err7: Bit set to 1 (IO module): Indicates ADC read error in the analog module

Err8: Bit set to 1 (Coupler/IO module): Indicates memory write/erase operation failed

Err9: Bit set to 1 (Coupler): Indicates no saved station record in memory

Err10: Bit set to 1 (Coupler): Indicates the memory station record differs from the boot scan

Err11: Bit set to 1 (Coupler): Indicates no module station number was detected in the boot scan

Err12: Bit set to 1 (Coupler): Indicates communication timeout in Polling Mode for IO modules

Err13: Bit set to 1 (Coupler): Indicates station failure

Err14: Bit set to 1 (Coupler/IO module): Indicates data length in operating mode exceeds the set value

Err15: Bit set to 1 (Coupler): Indicates hot-swap function recovery failure

Err16: Bit set to 1 (Coupler): Indicates network initialization failure

Err17: Bit set to 1 (Coupler): Indicates register address exceeds the control range



Error Module (01-32) : Records IO module timeout information, 32-bit data ordered from HSB to LSB

Description	Error Module (01-32) [4 Byte]									
Description	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0		
Module Error [3]	Slot32	Slot31	Slot30	Slot29	Slot28	Slot27	Slot26	Slot25		
Module Error [2]	Slot24	Slot23	Slot22	Slot21	Slot20	Slot19	Slot18	Slot17		
Module Error [1]	Slot16	Slot15	Slot14	Slot13	Slot12	Slot11	Slot10	Slot9		
Module Error [0]	Slot8	Slot7	Slot6	Slot5	Slot4	Slot3	Slot2	Slot1		

Slot1: IO module ID 1; Bit set to 1 indicates polling timeout for this module Slot2: IO module ID 2; Bit set to 1 indicates polling timeout for this module Slot3: IO module ID 3; Bit set to 1 indicates polling timeout for this module : (and so on)

:

Slot32: IO module ID 32; Bit set to 1 indicates polling timeout for this module

Error Module (33-64): Records IO module timeout information, 32-bit data ordered from HSB to LSB

Description	Error Module (33-64) [4 Byte]									
Description	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0		
Module Error [3]	Slot64	Slot63	Slot62	Slot61	Slot60	Slot59	Slot58	Slot57		
Module Error [2]	Slot56	Slot55	Slot54	Slot53	Slot52	Slot51	Slot50	Slot49		
Module Error [1]	Slot48	Slot47	Slot46	Slot45	Slot44	Slot43	Slot42	Slot41		
Module Error [0]	Slot40	Slot39	Slot38	Slot37	Slot36	Slot35	Slot34	Slot33		

Slot33: IO module ID 33; Bit set to 1 indicates polling timeout for this module Slot34: IO module ID 34; Bit set to 1 indicates polling timeout for this module Slot35: IO module ID 35; Bit set to 1 indicates polling timeout for this module :

(and so on)

:

Slot64: IO module ID 64; Bit set to 1 indicates polling timeout for this module



6.5 Serial Communication Parameters

6.5.1 Valid Mode Parameters

Serial Port Modes Function	Master	Slave	Free Port	Description
Parameters				
Communication Port		Port 1~3		RS485(Port 1,2), RS232(Port 3)
Serial Mode	•	•	•	Modbus RTU/ASCII Note 1
Transmission Format	• • •		Data bits: 7, 8 Parity bit: None, Odd, Even Stop bits: 1, 2	
Baud Rate	•	•	•	1200~115200
Character Interval	•	•	•	1.5t~200t
Data Input Processing Mode	•			Retain last input value, clear input value
Data Output Mode	•			Polling, data change
Command Delay Time	•		•	Custom, default 100ms
Output Module Reset Time	•			Custom, default 0ms (disabled)
Output Module Control	٠			Enabled/Disabled
Output Module Control Mode	•			Polling (continually active), rising edge trigger (single activation)
Power-on Output Module Control Mode	•			Enabled/Disabled
Command Reply Timeout	•		•	Custom, default 1000ms
Slave ID		•		Custom, default 1
Response Delay Time		•		Custom, default 50ms
Communication Return Mode			•	Automatic reporting, acknowledge mode

Note 1: ASCII Mode is currently not supported by the firmware version.



6.5.2 Function Parameter Description

- (1) (M/S/F) Operating Modes:
 - Modbus Master: Used with virtual modules starting with SubM or SubMS_
 - Modbus Slave: Used with virtual modules starting with SubS_ or SubMS
 - Free Port Mode: Used with virtual modules starting with SubF_
- (2) (M/S/F) Communication Ports:
 - Port 1: RS485 (labeled 1A.1B on the casing)
 - Port 2: RS485 (labeled 2A.2B on the casing)
 - Port 3: RS232 (labeled TX.RX on the casing)
- (3) (M/S/F) Serial Mode: Modbus Protocol Mode
 - RTU
 - ASCII

(4) (M/S/F) Transmission Format:

Supports eight modes based on data bits, parity bits, and stop bits.

- (N, 8, 1)
- (N, 8, 2)
- (E, 8, 1)
- (O, 8, 1)
- (E, 7, 1)
- (E, 7, 2)
- (O, 7, 1)
- (O, 7, 2)

(5) (M/S/F) Baud Rate:

Standard baud rate, default 9600bps.

- 1200 bps
- 2400 bps
- 4800 bps
- 9600 bps
- 14400 bps
- 19200 bps
- 38400 bps
- 57600 bps
- 115200 bps

(6) (M/S/F) Character Interval:

Time interval for receiving packet data; T represents the time for a single character transmission, related to the baud rate, default is 3.5T.

- 1.5T
- 3.5T
- 5T
- 10T
- 10T
- 20T
- 50T
- 100T
- 200T

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(7) (M) Data Input Processing Mode:

Defines how input data is handled during a timeout while reading from devices. The default is to retain the last input value.

- Retain last input value
- Reset input value to zero
- (8) (M) Data Output Mode:

In Master mode, this defines how the virtual output module sends commands.

- Polling Mode: Sends packets periodically
- Data Change: Sends write commands only when output data changes

(9) (M/F) Command Delay Time (ms):

Interval between Modbus command transmissions (from receiving a response packet from a device to sending the next command). Range: 1-65535 ms, default is 100ms.

(10) (M) Output Module Reset Time (ms):

If the CM111 module does not update data after the set time in communication with the coupler system, the output module control data will be set to 0.A setting of 0ms disables the reset function.

- 0: Function disabled
- Available range: 1-65535

(11) (M) Output Module Control:

When it is necessary to control Modbus module commands, the content of SubM_Control_Output_xxDev should be used as a control value to determine whether the corresponding module sends commands for read/write control.

- Off
- On

(12) (M) Output Module Control Mode:

The method used to control the output module. This control value is only valid when the output module control function is enabled.

- Polling (continually active)
- Rising edge trigger (single activation)

(13) (M) Power-On Output Module Control Mode:

Sets the timing for when the output module sends commands.

- On: The CM111 module will send output module commands immediately after power stabilization.
- Off: The CM111 waits to send output module commands until communication control with the coupler is established.

(14) (M/F) Command Reply Timeout (ms):

The time the master station waits for a response after sending a command to a slave device. Valid range: 1–65535 ms, default is 1000 ms.

(15) (S) Slave ID:

When switching to Slave mode, this ID is the slave ID. The valid range is 1–247.

(16) (S) Response Reply Time :

When switching to Slave mode, the time it takes for the module to respond after receiving a command. Valid range: 0–65535 ms, default is 50 ms.

(17) (F) Communication Return Mode :

The module's sending/receiving mode when switching to FreePort Mode.

- Autonomous Reporting: Displays received data in the configured virtual input module.
- Acknowledge Mode: Requires control of virtual output module commands (requests) via SubF_Control_Status to display received data in the configured virtual input module (response).



6.5.3 Virtual Module Settings and Descriptions

- I. Master Mode
- (1) Diagnostic Module
- Module Status Input (SubMS_Status_xxDev): Available in four lengths: 08, 16, 24, and 32 Dev, each occupying 1, 2, 3, or 4 bytes of input space. Each bit corresponds to the index of a virtual module, with "0" indicating no error and "1" indicating an error in that module.
- Module Error Code Input (SubMS_ErrorInfo_xxDev): Available in four lengths: 08, 16, 24, and 32 Dev, each occupying 8, 16, 24, or 32 words of input space. Each word contains an error message associated with a specific virtual module index, composed of the module's function code and error code. Users can identify error causes based on these codes to determine corrective actions.

Master Error Codes		
Error Code	Description	Solution
0x00	Operating normally	None
0xAA	Slave device timeout	Verify module serial port settings and connections to the slave device
0xXX	Slave device error code	Address issues based on the error codes from the slave device

- Module Output Control (SubM_Control_Output_xxDev): Available in four lengths: 08, 16, 24, and 32 Dev, occupying 1, 2, 3, or 4 bytes of input space. Each bit acts as a control switch for a virtual module index. This setting takes effect only when the output module control function is enabled. In Polling Mode, when the control bit is set to 0, command transmission is disabled; when set to 1, command transmission is enabled. In rising-edge trigger mode, only the transition from 0 to 1 triggers command transmission.
- **Polling Time Input (SubM_Polling_Time):** Occupies 3 words, representing polling times for Port1, Port2, and Port3.



(2) Read Coil Module (SubS_Write_xxxBytes_01): Data length: 8 to 128 bytes

.....

✓ 03-Sub Module I/O Read(01) - Master
SubM_Read_008Bits_01
SubM_Read_016Bits_01
SubM_Read_024Bits_01
SubM_Read_032Bits_01
SubM_Read_040Bits_01
SubM_Read_048Bits_01
SubM_Read_056Bits_01
SubM_Read_064Bits_01
SubM_Read_072Bits_01
SubM_Read_080Bits_01
SubM_Read_088Bits_01
SubM_Read_096Bits_01
SubM_Read_104Bits_01
SubM_Read_112Bits_01
SubM_Read_120Bits_01

Figure 6.12

(3) Read Discrete Coil Module (SubS_Write_xxxBytes_02): Data length: 8 to 128 bytes

✓ 04-Sub Module I/O Read(02) - Master
SubM_Read_008Bits_02
SubM_Read_016Bits_02
SubM_Read_024Bits_02
SubM_Read_032Bits_02
SubM_Read_040Bits_02
SubM_Read_048Bits_02
SubM_Read_056Bits_02
SubM_Read_064Bits_02
SubM_Read_072Bits_02
SubM_Read_080Bits_02
SubM_Read_088Bits_02
SubM_Read_096Bits_02
SubM_Read_104Bits_02
SubM_Read_112Bits_02
SubM_Read_120Bits_02
SubM_Read_128Bits_02

Figure 6.13



(4) Read Input Register Module (SubS_Write_xxxWords_04): Data length: 8 to 128 bytes

✓ 06-Sub Module I/O Rea	ad(04) - Master
SubM_Read_01Words_04	
SubM_Read_02Words_04	
SubM_Read_03Words_04	
SubM_Read_04Words_04	
SubM_Read_05Words_04	
SubM_Read_06Words_04	
SubM_Read_07Words_04	
SubM_Read_08Words_04	
SubM_Read_09Words_04	
SubM_Read_10Words_04	
SubM_Read_11Words_04	
SubM_Read_12Words_04	
SubM_Read_13Words_04	
SubM_Read_14Words_04	
SubM_Read_15Words_04	
SubM_Read_16Words_04	
	Figure 6.14

(5) Read Holding Register Module (SubS_Write_xxxWords_03): Data length: 8 to 128 bytes

✓ 05-Sub Module I/O Read(03) - Master
SubM_Read_01Words_03
SubM_Read_02Words_03
SubM_Read_03Words_03
SubM_Read_04Words_03
SubM_Read_05Words_03
SubM_Read_06Words_03
SubM_Read_07Words_03
SubM_Read_08Words_03
SubM_Read_09Words_03
SubM_Read_10Words_03
SubM_Read_11Words_03
SubM_Read_12Words_03
SubM_Read_13Words_03
SubM_Read_14Words_03
SubM_Read_15Words_03
SubM_Read_16Words_03



(6) Write Coil Module (SubS_Read_xxxBytes_0F): Data length: 8 to 128 bytes

✓ 10-Sub Module I/O Write(0F) - Master
SubM_Write_008Bits_0F
SubM_Write_016Bits_0F
SubM_Write_024Bits_0F
SubM_Write_032Bits_0F
SubM_Write_040Bits_0F
SubM_Write_048Bits_0F
SubM_Write_056Bits_0F
SubM_Write_064Bits_0F
SubM_Write_072Bits_0F
SubM_Write_080Bits_0F
SubM_Write_088Bits_0F
SubM_Write_096Bits_0F
SubM_Write_104Bits_0F
SubM_Write_112Bits_0F
SubM_Write_120Bits_0F
SubM_Write_128Bits_0F
Figure 6.16

Supports Single Coil Writing (SubM_Write_xxxBits_05)

• 07-Sub Module I/O Write(05) - Master

SubM_Write_016Bits_05

Figure 6.17



(7) Write Holding Register Module (SubM_Write_xxxWords_10): Data length: 1 to 16 words

✓ 09-Sub Module I/O Write(10) - Master
SubM_Write_01Words_10
SubM_Write_02Words_10
SubM_Write_03Words_10
SubM_Write_04Words_10
SubM_Write_05Words_10
SubM_Write_06Words_10
SubM_Write_07Words_10
SubM_Write_08Words_10
SubM_Write_09Words_10
SubM_Write_10Words_10
SubM_Write_11Words_10
SubM_Write_12Words_10
SubM_Write_13Words_10
SubM_Write_14Words_10
SubM_Write_15Words_10
SubM_Write_16Words_10

Figure 6.18

Supports single register writing (SubM_Write_xxxWords_06)





- II. Slave Mode
- (1) Diagnostic Module
- Module Status Input (SubMS_Status_xxDev): Available in four lengths: 08, 16, 24, and 32 Dev, each occupying 1, 2, 3, or 4 bytes of input space. Each bit corresponds to the index of a virtual module, with "0" indicating no error and "1" indicating an error in that module.
- Module Error Code Input (SubMS_ErrorInfo_xxDev): Available in four lengths: 08, 16, 24, and 32 Dev, each occupying 8, 16, 24, or 32 words of input space. Each word contains an error message associated with a specific virtual module index, composed of the module's function code and error code. Users can identify error causes based on these codes to determine corrective actions.

Slave Error Codes		
Error Code	Description	Solution
0x00	Operating normally	None
0x01	Invalid function code	Module does not support the current function code; refer to the relevant function code module.
0x02	Invalid data address	Data exceeds module address range; modify the data starting position or length.
0x03	Invalid data length	Incorrect data length; adjust to the correct length.
0x04	Incorrect or invalid virtual module configuration	Refer to the settings for the corresponding virtual module.

(2) Read Coil Module (SubS_Write_xxxBytes_01): Data length: 1 to 128 bytes
(3)

✓ 03-Sub Module I/O Write(01) - Slave
SubS_Write_001Bytes_01
SubS_Write_002Bytes_01
SubS_Write_004Bytes_01
SubS_Write_008Bytes_01
SubS_Write_016Bytes_01
SubS_Write_032Bytes_01
SubS_Write_064Bytes_01
SubS_Write_128Bytes_01





(4) Read Discrete Coil Module (SubS_Write_xxxBytes_02): Data length: 1 to 128 bytes

✓ 04-Sub Module I/O Write(02) - Slave
SubS_Write_001Bytes_02
SubS_Write_002Bytes_02
SubS_Write_004Bytes_02
SubS_Write_008Bytes_02
SubS_Write_016Bytes_02
SubS_Write_032Bytes_02
SubS_Write_064Bytes_02
SubS_Write_128Bytes_02
Figure 6.21

(5) Read Input Register Module (SubS_Write_xxxWords_04): Data length: 1 to 64 words

✓ 06-Sub Module I/O Write(04) - Slave
SubS_Write_001Words_04
SubS_Write_002Words_04
SubS_Write_004Words_04
SubS_Write_008Words_04
SubS_Write_016Words_04
SubS_Write_032Words_04
SubS_Write_064Words_04 Figure 6.22

(6) Read Holding Register Module (SubS_Write_xxxWords_03): Data length: 1 to 64 words

✓ 05-Sub Module I/O Write(03) - Slave
SubS_Write_001Words_03
SubS_Write_002Words_03
SubS_Write_004Words_03
SubS_Write_008Words_03
SubS_Write_016Words_03
SubS_Write_032Words_03
SubS_Write_064Words_03 Figure 6.23



(7) Write Coil Module (SubS_Read_xxxBytes_0F): Data length: 1 to 128 bytes

	✓ 10-Sub Module I/O Read(0F) - Slave	
	SubS_Read_001Bytes_0F	
	SubS_Read_002Bytes_0F	
	SubS_Read_004Bytes_0F	
	SubS_Read_008Bytes_0F	
	SubS_Read_016Bytes_0F	
	SubS_Read_032Bytes_0F	
	SubS_Read_064Bytes_0F	
	SubS_Read_128Bytes_0F	
Suppor	Figure 6.24 ts Single Register Write (SubS_Read_xxxW Figure 6.25	ords_05)
	✓ 07-Sub Module I/O Read(05) - Slave	
	SubS Read 002Bytes 05	

(8) Write Holding Register Module (SubS_Read_xxxWords_10): Data length: 1 to 64 words

	✓ 09-Sub Module I/O Read(10) - Slave
	SubS_Read_001Words_10
	SubS_Read_002Words_10
	SubS_Read_004Words_10
	SubS_Read_008Words_10
	SubS_Read_016Words_10
	SubS_Read_032Words_10
	SubS_Read_064Words_10
Supports	Figure 6.26 s single register writing (SubS_Read_xxxWords_06)
	✓ 08-Sub Module I/O Read(06) - Slave
	SubS_Read_001Words_06

Figure 6.27



III. Free Mode

	Control and Sta	tus Module Data I	Definition	
Data Direction	Data Name	Data Variable Name	Data Type	Byte Offset
	Send Control Feedback	TransControl	uint16_t	0
	Send Status Feedback	TransStatus	uint16_t	2
Innut Data	Send Length Feedback	TransLenth	uint16_t	4
input Data	Receive Count Value	ReceiveCount	uint16_t uint16_t	6
	Receive Length	ReceiveLenth	uint16_t	8
	Error Count Value	ErrCount	uint16_t	10
Output Data	Output Control	SendControl	uint16_t	0
Output Data	Send Length	SendLenth	uint16_t	2

(1) Status Control Module (SubF_Control_Status):

(2) Input Data Module (SubF_Read_xxxWords): Data length: 1 to 64 words

1-Sub Module I/O Read - Free Port

SubF_Read_001Words

SubF_Read_002Words

SubF_Read_004Words

SubF_Read_008Words

SubF_Read_016Words

SubF_Read_032Words

SubF_Read_064Words

Figure 6.28

(3) Output Data Module (SubF_Write_xxxWords): Data length: 1 to 64 words

2-Sub Module I/O Write - Free Port
 SubF_Write_001Words
 SubF_Write_002Words
 SubF_Write_004Words
 SubF_Write_008Words
 SubF_Write_016Words
 SubF_Write_032Words
 SubF_Write_064Words
 Figure 6.29



6.5.4 Diagnostic Module

Free Port Mode ✓ 01-Sub Module Diagnostic SubMS_Status_08Dev SubMS_Status_16Dev SubMS_Status_24Dev SubMS_Status_32Dev SubM_Polling_Time SubM_Control_Output_08Dev SubM_Control_Output_16Dev SubM_Control_Output_24Dev SubM_Control_Output_32Dev SubF_Control_Status ✓ 02-Sub Module Error Information SubMS_ErrorInfo_08Dev SubMS_ErrorInfo_16Dev SubMS_ErrorInfo_24Dev SubMS_ErrorInfo_32Dev

Slave Mode

✓ 01-Sub Module Diagnostic
SubMS_Status_08Dev
SubMS_Status_16Dev
SubMS_Status_24Dev
SubMS_Status_32Dev
SubM_Polling_Time
SubM_Control_Output_08Dev
SubM_Control_Output_16Dev
SubM_Control_Output_24Dev
SubM_Control_Output_32Dev
✓ 02-Sub Module Error Information
SubMS_ErrorInfo_08Dev
SubMS_ErrorInfo_16Dev
SubMS_ErrorInfo_24Dev
SubMS_ErrorInfo_32Dev



Master Mode

✓ 01-Sub Module Diagnostic	
SubMS_Status_08Dev	
SubMS_Status_16Dev	
SubMS_Status_24Dev	
SubMS_Status_32Dev	
SubM_Polling_Time	
SubM_Control_Output_08Dev	
SubM_Control_Output_16Dev	
SubM_Control_Output_24Dev	
SubM_Control_Output_32Dev	
✓ 02-Sub Module Error Information	
SubMS_ErrorInfo_08Dev	
SubMS_ErrorInfo_16Dev	
SubMS_ErrorInfo_24Dev	
SubMS_ErrorInfo_32Dev	



7. Appendix I: i-Designer Instructions

7.1 Installation

Download the i-Designer program from the official website, then click on the program (as shown in the figure) to install it.



Figure 7.1 Program Icon

After reading the user agreement, please check the box and click Start Installation.



Figure 7.2 Click Start Installation



During installation, the progress will be displayed.



Figure 7.3 Installation Progress

Once the software installation is complete, you can choose to run it immediately by clicking the Finish button.





7.2 UI Screen Description

After installation, locate the program icon on the desktop and click it to open the settings screen (see the figure below).



Figure 7.5 Program Icon

The screen is organized as follows, from top to bottom:

- I. Tab Area: Select different product series or switch languages.
- II. Function Key Area: Displays different function keys based on the selected tab.
- III. Display and Configuration Area: Shows the module status and settings.
- IV. Progress Display Area: Displays the progress of various functions in percentages, helping users understand the current execution status, such as configuration or updates.



Figure 7.6 Default Homepage



Tab Area:

- (1) Homepage Tab: Provides information about i-Designer and options for switching the language.
- (2) Product Settings Tab: Used for setting parameters for various **C**-**G**RID product series.



Figure 7.7 Tab



Function Key Area: The function keys displayed here vary based on the selected tab and product. The relevant descriptions are as follows:

Loon Nome Description										
	Icon	Name	Description							
	1	About i- Designer	Shows software version information.							
	ABC	Switch Languages	Switches between Traditional Chinese, Simplified Chinese, and English.							
	t↓	Connection Mode	Offers automatic or manual module connection modes.							
		Connection Info								
	~~	Connect	Connects to the module.							
	~7	Disconnect	Disconnects from the module.							
	0	System stop	Temporarily stops the module system.							
	0	System running	Starts the module system.							
	Ð	Auto Station Assignment	Reconfigures the station numbers of the module system.							
	1	Upload parameters	Updates the module settings.							
	~	Online Adjustment								
	⊻ = □=	Check for Updates	Searches and compares the current module firmware version to check if it's the latest.							
	C	Firmware update	Manually updates the module firmware.							
	-	Point Information Overview	Displays all operational data of the modules.							



					i-I	Designer[USB	Mode]					-		×
١ç	ıgs	(C Series O	nline Settin	gs Ne	emo Series On	line Settings	GX S	eries Online Settir	ngs				
^	~7		~~	C	\oslash	D		C	 Image: A start of the start of		С	•	1	
n	nnect	t C	DisConnec	t System ON	System OFF	Addressing	Upload Parameters	Reload	l Online Configuration	Updat Chec	es Firmware k Update	Module Monitor		
						(Control							
		Μ	1odule Co	nfiguration					Module Settings	5				
		I	GX-CL12	•					✓ 1-General Sett	tings				
									Module Slot	C)			
				27 27 27 28 27 29 20 20					Time Lock(ms)	C)			
	-		<u>I</u> Y						✓ 2-Module Info	ormation	i i			
									Firmware Version	1	.1.1.r			
									Hardware Version	n N	/01			
									Product Serial Nu	mber (GX-CL1202410	808000		
		Lo	og Inform	ation										
				DateTime		Descrip	tion							
			0	2024-12-0	5 09:54:59	Read ac	dressing succ	essfully						
			S	2024-12-0	5 09:54:59	Connec	t successfully							
		\rightarrow	0	2024-12-0	5 09:55:29	System	stop successfu	illy						
		÷	© ©	2024-12-09 2024-12-09 2024-12-09	5 09:54:59 5 09:54:59 5 09:55:29	Read ac Connec System	ddressing succ t successfully stop successfu	essfully Illy						

Figure 7.8 Function Key Area

Display and configuration section : i-Designer[USB Mode] × Nemo Series Online Settings Homepage M Series Online Settings C Series Online Settings GX Series Online Settings C Ð ~ С ► \checkmark Online System ON Communication Communication Connect DisConnect Addressing Upload Reload Updates Firmware Parameters Configuration Update Check Communication Control Module List Module Configuration Module Settings Module Name Module ... ✓ 1-General Settings ✓ GX-CL120 0 \rightarrow Module Slot 0 GX-HC100 1 Time Lock(ms) 0 GX-HC100 2 ✓ 2-Module Information Firmware Version 1.1.1.r Hardware Version V01 Product Serial Number GX-CL120241000808 Log Information DateTime Description Ø 2024-12-05 09:54:59 Read addressing successfully 2024-12-05 09:54:59 Connect successfully Ø Ø 2024-12-05 09:55:29 System stop successfully \rightarrow

Figure 7.9 Display and configuration section









7.3 i-Designer Information Verification



Figure 7.11 Software Information



7.4 Language Settings

i-Designer currently supports three languages: Traditional Chinese, Simplified Chinese, and English. Use this feature to change the language.



Figure 7.12 Language Selection



7.5 COM Port Connection Settings

i-Designer communicates with the **iD**-**GRID** coupler module primarily through the COM Port interface. Connection modes include automatic module search mode and manual COM Port connection mode.

Before setting up a custom connection with the **iD**-**GRID**, please confirm the COM Port number assigned to the coupler module to proceed with configuration.



Figure 7.13 Connection Modes

-					I-Designer						– L	_ X
Homepage	M Series Online Settings	C Series On	line Setting	s Ne	mo Series Onli	ine Settings	GX Se	ries Online Settir	ngs			
t↓	🔒 🔼			\oslash		1	B	\sim		C		
Communication Mode -	Communication Connect Information	DisConnect	System ON	System OFF	Addressing	Upload Parameters	Reload	Online Configuration	Updates Check	Firmware Update		
Auto Mode	mmunication				C	Control						
✓ Custom Mo	de	Module Con	figuration				1	Module Settings				
Module Na	me Module											
		Log Informat	tion									
		D	ateTime		Descripti	on						
		2	024-12-05	09:59:38	Read add	dressing succe	essfully					
		2	024-12-05	09:59:39	Connect	successfully						
		2	024-12-05	09:59:39	Pair succ	essfully						
		→ ⊘ 2	024-12-05	10:02:17	Disconne	ect						•

Figure 7.14 Custom Mode Setup



🛃 Device Manager	 ×
File Action View Help	
~ 🛃 HQN2188	^
Audio inputs and outputs	- 11
Audio Processing Objects (APOs)	
Batteries	
Biometric devices	
> 🚺 Bluetooth	
> 👰 Cameras	
🔾 💻 Computer	
Disk drives	
Display adapters	
> Firmware	
Human Interface Devices	
IDE ATA/ATAPI controllers	
Jungo Connectivity	
Keyboards	
Mice and other pointing devices	
> 🥅 Monitors	
Network adapters	
 Ports (COM & LPT) 	
₩ USB 序列装置 (COM3)	- 11
Print queues	
Processors	
Security devices	
> 😴 SIMATIC NET	
Smart card readers	



🚟 Co	mmunication In	formation	×
Cou	pler Module		
\checkmark	USB Mode		
	Port Number	COM3	
		0	
		Save	

Figure 7.16 Configuring COM Port Settings



7.6 Connection Setting Instructions

Once the connection is successful, the current connection mode will be displayed in the window, and the firmware version of all modules will be detected. If the system is running, a pop-up window will ask whether to stop the system to perform firmware version detection for all modules.

						i-Designe	r						×
Homepage	M Series Online S	ettings	C Series On	line Setting	s Ne	mo Series Onl	line Settings	GX S	eries Online Settir	igs			
t↓	D.	~~	~~	C	\oslash	đ	1	B	\sim		C		
Communication Mode +	Communication Information	Connect	DisConnect	System ON	System OFF	Addressing	Upload Parameters	Reload	Online Configuration	Updates Check	Firmware Update		
	Communicatio	on	-			(Control						
Module List			Module Conf	figuration					Module Settings				
Module Na	ame Mode	ule											
			Log Informat	tion									
			D	ateTime		Descripti	ion						
			20	024-12-05 (09:59:38	Read ad	dressing succe	essfully					
			20	024-12-05	09:59:39	Connect	successfully						
			20	024-12-05	09:59:39	Pair succ	essfully						
			→ ⊘ 20	024-12-05	10:02:17	Disconne	ect						•

Figure 7.17 Setting Connection



Homepage M Series Online Settings	C Series On	i-D line Settings Ner	esigner[USB Mode] no Series Online Settings	GX	Series Online Settir	ngs		– – ×
	~~	\circ	a	8			C	•
Communication Communication Connect Mode Information Communication	DisConnect	System System ON OFF	Addressing Upload Parameters Control	Reloa	d Online Configuration	Updates Check	Firmware M Update M	Module Monitor
Module List	Module Con	figuration			Module Register			
Module Name Module	GX-CL120	•			✓ 1-General Sett	ings		
? In or	der to detect w	whether there is a new	firmware version for the r	nodule, d	do you want to stop	the system?	2410008	308
	Log Informa	tion	Description					
	2	024-12-05 09:54-59	Read addressing su	ccessfull	v			
	\rightarrow \bigcirc 2	024-12-05 09:54:59	Connect successfully	,	,			

Figure 7.18 After Connection, The Module Automatically Checks For Updates And Notifies You If the system is stopped, i-Designer will automatically detect the module version.



						i-D	esigner[USB M	ode]					-	□ ×
Homepage M	Series Onli	ne Setti	ings	C Series	Online Setting	js Nen	no Series Online	e Settings	GX Seri	ies Online Set	ttings			
TJ.				~~	0	0	1	1	C	\checkmark		C		
Communication Co Mode •	ommunic Informat					F	Firmware Updat	ie			>	< mware odate	Module Monitor	
	Commu			Mobus Sta	ition Modb	us Name	Current	Firmware V	ersion	Newest Firn	nware Version			
Module List		→ [2	GX-HC	2100	1.0.2.r			1.0.3.r				
→ → → → → → → → → →	00											2024100	0808	
	[Start Update							
					2024 12 05	00-54-50	Copport	uccose fully				_		
				\rightarrow	2024-12-05	09:54:59	System sto	op successfully	lly					
									,					

Figure 7.19 Module Version Data



Only after the system is stopped can the module functions be configured.

					i-D	Designer[USB	Mode]					-	□ ×
Homepage	M Series Online	Settings	C Series O	nline Setting	gs Ne	mo Series Onl	ine Settings	GX	Series Online Settir	ngs			
↑ J	- B	~~	~~	C	0	đ	1	ß		M =	C	•	
Communication Mode •	Communication Information	n Connect	DisConnec	t System ON	System OFF	Addressing	Upload Parameters	Reloa	d Online Configuration	Updates Check	Firmware Update	Module Monitor	
	Communicat	tion				C	Control						
Module List			Module Co	nfiguration					Module Register	r			
Module Na	me Mo	dule	GX-CL120						✓ 1-General Sett	tings			
→ → GX-CL1	20 0		00 EMO/ 44 EMO/ 57 EMO/ 44 EMO						Module Slot	0			
GX-F	100 1								Time Lock(ms)	0			
GX-F	10100 2								✓ 2-Module Info	ormation			
									Firmware Version	1.1	.1.r		
				:;;;;;;;;; ;;;;;;;;;;;;;;;;;;;;;;;;;;;					Hardware Version	v0	1		
									Product Serial Nu	mber GX	-CL1202410	80800	
			Log Inform	ation									
				DateTime		Descripti	on						
			0	2024-12-05	10:02:17	Disconne	ect						
				2024-12-05	10:05:54	Read add	dressing succe	essfully					
			S	2024-12-05	10:05:54	Connect	successfully						
			→ 📀	2024-12-05	10:06:02	System r	un successfull	ly					.

Figure 7.20 System Stop Screen

-	i-I	Designer[USB Mode]	- 🗆 X
Homepage M Series Online Settings	C Series Online Settings Ne	mo Series Online Settings GX Series Online Setting	ngs
1 🔒 🗖		🗗 🕇 C 🗸	Ĕ : ₩G (0)
Communication Communication Connect Mode - Information	DisConnect System System ON OFF	Addressing Upload Reload Online Parameters Configuration	Updates Firmware Module Check Update Monitor
Communication		Control	
Module List	Module Configuration	Module Settings	;
Module Name Module		✓ 1-General Set	tings
→		Module Slot	0
GX-HC100 1		Time Lock(ms)	0
GX-HC100 2		✓ 2-Module Info	ormation
		Firmware Version	1.1.1.r
		Hardware Version	V01
		Product Serial Nu	mber GX-CL120241000808
	Log Information		
	DateTime	Description	
	2024-12-05 10:05:54	Read addressing successfully	*
	2024-12-05 10:05:54	Connect successfully	
	2024-12-05 10:06:02	System run successfully	
	→ ② 2024-12-05 10:06:38	System stop successfully	
			•

Figure 7.21 System Stop Screen



When connecting to X series modules, if the listed modules do not match the actual modules, you can search for modules through the Auto Station Assignment function.

					i-[Designer[USB	Mode]		0			-	×
Homepage	M Series Onlir	ne Settings	C Series On	line Setting	is Ne	emo Series Onl	line Settings	GX	Series Online Settir	ngs			
t↓	D.	~7	~~	0	\oslash	đ		B			C	۰	
Communication Mode +	Communicati Information	on Connect	DisConnect	System ON	System OFF	Addressing	Upload Parameters	Reloa	d Online Configuration	Updates Check	Firmware Update	Module Monitor	
	Communic	ation				(Control						
Module List			Module Con	figuration		Addressing			Module Settings				
									✓ 1-General Set				
→ → GX-CL1													
									✓ 2-Module Info				
			Log Informa	tion									
			C	DateTime		Descrip	tion						
			2	024-12-05	09:54:59	Read ac	dressing suce	cessfully	/				
			② 2	024-12-05	09:54:59	Connec	t successfully						
			2	024-12-05	09:55:29	System	stop successfu	ully					
			→ 📀 2	024-12-05	09:59:31	Addres	sing						
		_											
Status						20%	b .	· p					

Figure 7.22 Station Assignment in Progress



After configuring the module functions, you must click "Upload Parameters" to save the settings correctly.

Ma		Ŭ	·			i-C	Designer[USB	Mode]					-	×
Н	omepage	M Series Onlir	ne Settings	C Series On	line Setting	s Ne	mo Series On	line Settings	GX S	Series Online Settir	ngs			
	↑ ↓		~7	~~	0	\oslash	đ		C	~		C	0	
Cor	nmunication Mode -	Communication	on Connect	DisConnect	System ON	System OFF	Addressing	Upload Parameters	Reload	d Online Configuration	Upda Che	ates Firmware ck Update	Module Monitor	
		Communic	ation					Control						
ſ	/Iodule List			Module Cont	figuration			Upload Par	ameters	Aodule Settings				
	Module Na	me N	lodule	GV.CL17						✓ 1-General Sett	tings			
→	✓ GX-CL1	20 0		9 EH-07 16 Harris I 16 Harris I 17 Harris I 18 Harris						Module Slot		0		
	GX-F	IC100 1			21 0 0 10 21 0 0 21 000 0 01 000 0 01					Time Lock(ms)		0		
	GX-F	10100 2								✓ 2-Module Info	rmatio	'n		
										Firmware Version		1.1.1.r		
										Hardware Version		V01		
										Product Serial Nu	mber	GX-CL1202410	808000	
				Log Informat	tion									
				D	ateTime		Descript	tion						
				2	024-12-05	10:05:54	Connect	t successfully						
				20	024-12-05	10:06:02	System	run successful	ly					
				2	024-12-05	10:06:38	System	stop successfu	illy					
				→ 🔮 20	024-12-05	10:08:17	Upload	parameters su	ccessfull	у				*
_														

Figure 7.23 Screen After Uploading Parameters



You can view the IO point status through the online debugging feature.

Note: You must disconnect from the external master station before proceeding.

								i-1	Designer[USE	3 Mode]		· · · · ·		U	_		×
Ho	mepage	M Ser	ries Or	nline Set	ttings	C Series (Online Setting	js Ne	emo Series Or	nline Settings	GX Se	ries Online Settir	ngs				
	↑ ↓		D		~	~	C	0	đ	1	8	\checkmark	⊠ -	C	•	1	
Com	munication Mode •	Com Info	munica ormati	ation on	Connect	DisConne	ct System ON	System OFF	Addressing	Upload Parameters	Reload	Online Configuration	Updates Check	Firmware Update	Module Monitor		
		Co	ommu	nicatior	1					Control						•	
	te de la Car		Locat	ion Info	ormation	Overview								o x			
IVI	Iodule List	- [-		
	Module Na	me	,	Name			Value								-		
\rightarrow	→ GX-CL12	20	→	✓ Mod	dule: Stat	ion : 1 Mod	lule Name : O	6X-HC100) (DC_BA)					A			
	GX-H	IC100	L.,	CH1Pha	ase A Inp	ut Status	0										
	GX-H	C100		CH1Pha	ase_B Inp	ut Status	0										
				CH1Pha	ase_Z Inp	ut Status	0										
				CH1Dig	gital Input	t Signal	0										
				CH1Co	unter Ove	erflow Fl	0								0.0		
				CH1Co	unter Und	derflow F	0								08		
				CH1Co	unter Up	Flag (Bit6)	0										
				CH1Co	unter Dov	wn Flag (0										
				CH2Pha	ase_A Inp	ut Status	0										
				CH2Pha	ase_B Inp	ut Status	0										
				CH2Pha	ase_Z Inp	ut Status	0										
				CH2Dig	gital Input	t Signal	0										
				CH2C0	unter Ove	ertiow FI	0										
				CH2CO	unter Und	Elog (Pit6)	0										
				CH2Co	unter Dov	vn Flag (Bito)	0										
				C112C0	unter Dot		0							•			
			Sa	ive to E	xcel										-		•

Figure 7.24 Online Adjustment Screen



The system will detect whether the current module version is the latest and prompt for updates.

		i-Desig]ner[USB Mode]			- 0	×
Homepage M Series Online Se	ettings C Series Onli	ne Settings Nemo S	Series Online Settings	GX Series Online Settir	ngs		
1↓ 🖬	~	\bigcirc	d 🕇	2 <			
Communication Communication Mode • Information	Connect DisConnect	System System Add ON OFF	dressing Upload Parameters	Reload Online Configuration	Updates Firmware Check Update	e Module Monitor	
Communicatio	on		Control				
Module List		Firn	nware Update		×		
Module Name → GX-CL120 GX-HC100 GX-HC100	Mobus Station	Modbus Name GX-HC100	Current Firmware V 1.0.2.r	ersion Newest Firmv 1.0.3.r	vare Version	200808	

Figure 7.25 Firmware Update Screen



The GX-CL140 will display the Modbus register positions for the configured IO modules.

mepage	м	1 Series Online Se	ettings C Se	ries Online Setti	ngs Nem	i-Desig 10 Series Onli	ner[USB Mo ne Settings	de] GX Se	ries Online Settin	gs			- 0	
↑		D.	~	<u>-</u>	\oslash	Ð	1	้อ	~	⊻ = □=	C	-		
nmunication Mode -		Communication Information ation Informatio	Connect DisCo	onnect Syster ON	n System A OFF	Addressing	Upload Parameters	Reload	Online Configuration	Updates Check	Firmware Update	Location Information Overview		
1odule Lis		Name	Input Addre	Output Add	Input Add	Output A	Value					1		
Module	→	✓ Module: Sta	tion : 1 Module	Name : GX-DI4										
- GX-0		CH01 (Bit0)	0×0000		0x1000									
G		CH02 (Bit1)	0x0000		0x1000									
G		CH03 (Bit2)	0x0002		0x1000									
G		CH04 (Bit3)	0x0003		0x1000									
G		CH05 (Bit4)	0x0004		0x1000							68.1.20		
		CH06 (Bit5)	0x0005		0x1000							55.255.0		
		CH07 (Bit6)	0x0006		0x1000							68.1.1		
		CH08 (Bit7)	0x0007		0x1000							:EB:70:AA:DE		
		CH09 (Bit8)	0x0008		0x1000									
		CH10 (Bit9)	0x0009		0x1000									
		CH11 (Bit10)	0x000A		0x1000									
		CH12 (Bit11)	0x000B		0x1000							140225100042		
		CH13 (Bit12)	0x000C		0x1000							140233100042		
		CH14 (Bit13)	0x000D		0x1000									
		CH15 (Bit14)	0x000E		0x1000									
		CH16 (Bit15)	0x000F		0x1000									
		✓ Module: Sta	ation : 2 Module	Name : GX-DQ	40P									
		CH01 (Bit0)		0x0000		0x2000								
		CH02 (Bit1)		0x0001		0x2000								

Figure 7.26 Point Information Overview Screen