



This installation guide provides simple function information of PLC control. Please read carefully this data sheet and manuals before using products. Especially read safety precautions and handle the products properly.

## 1 Safety Precautions

■ Meaning of warning and caution inscription

	<b>WARNING</b>	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	<b>CAUTION</b>	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

### WARNING

- ① Do not contact the terminals while the power is applied.
- ② Protect the product from being gone into by foreign metallic matter.
- ③ Do not manipulate the battery. Charge, disassemble, hitting, short, soldering)

### CAUTION

- ① Be sure to check the rated voltage and terminal arrangement before wiring.
- ② When wiring, tighten the screw of terminal block with the specified torque range.
- ③ Do not install the flammable things on surroundings.
- ④ Do not use the PLC in the environment of direct vibration.
- ⑤ Except expert service staff, do not disassemble or fix or modify the product.
- ⑥ Use the PLC in an environment that meets the general specifications contained in this datasheet.
- ⑦ Be sure that external load does not exceed the rating of output product.
- ⑧ When disposing of PLC and battery, treat it as industrial waste.

## 2 Use of environment

■ To install, observe the below conditions.

No	Item	Specification	Standard	
1	Ambient temp.	0 ~ 55°C	-	
2	Storage temp.	-25 ~ 70°C	-	
3	Ambient humidity	5 ~ 95%RH, non-condensing	-	
4	Storage humidity	5 ~ 95%RH, non-condensing	-	
5	Vibration Resistance	Occasional vibration		
		Frequency	Acceleration	Amplitude
		5≤f<8.4Hz	-	3.5mm
		8.4≤f≤150Hz	9.8m/s <sup>2</sup> (1g)	-
		Continuous vibration		
		Frequency	Acceleration	Amplitude
5≤f<8.4Hz	-	1.75mm		
8.4≤f≤150Hz	4.9m/s <sup>2</sup> (0.5g)	-		
		Number	10 times in each direction for X, Y, Z	
			IEC 61131-2	

## 3 Performance Specifications

The following table shows the general specifications of the XGB.  
For more information, please refer to user manual.

■ General Specifications

Items	Specifications
Operation method	Reiterative operation, fixed cycle operation, Interrupt operation, constant period scan
I/O control method	Batch processing by simultaneous scan(Refresh method), Directed by program instruction
Processing speed (Basic instruction)	XBM-H type: 83ns/step, XBM/XEM-H2/HP type: 40ns/step
Program memory capacity(MK)	H type: 20Kstep, H2/HP Type: 64Ksteps
Program memory capacity(IEC)	H2/HP type: 384Kbyte
Maximum expansion stages	Main + Expansion 7slot (Communication: max 2slot, High speed I/F: max 2slot)
Operation mode	RUN, STOP, DEBUG
Self-diagnosis function	Delay of operation, abnormal memory, abnormal I/O
Program port	USB(1Ch)
Back-up method	Setting latch area at basic parameter
RTC	183 days (25°C), power off after charging(3.0V)
Built-in function	Cnet(RS-232,RS-485), Enet, PID, High-speed counter, Positioning [XBM-H: 2axis, APM] [XBM/XEM-H2: 2axis, XPM] [XBM/XEM-HP: 6axis, XPM]

## 4 Applicable Version

■ For system configuration, the following version is necessary.

- 1) XG5000 Software
  - XBM-DN32H/H2/HP: V4.22 or above
  - XEM-DN32H2/HP: V4.26 or above
- 2) O/S
  - XBM-H type: O/S less than V2.0
  - XBM-H2/HP type: O/S V2.0 or above
  - XEM-H2/HP type: O/S V2.1 or above

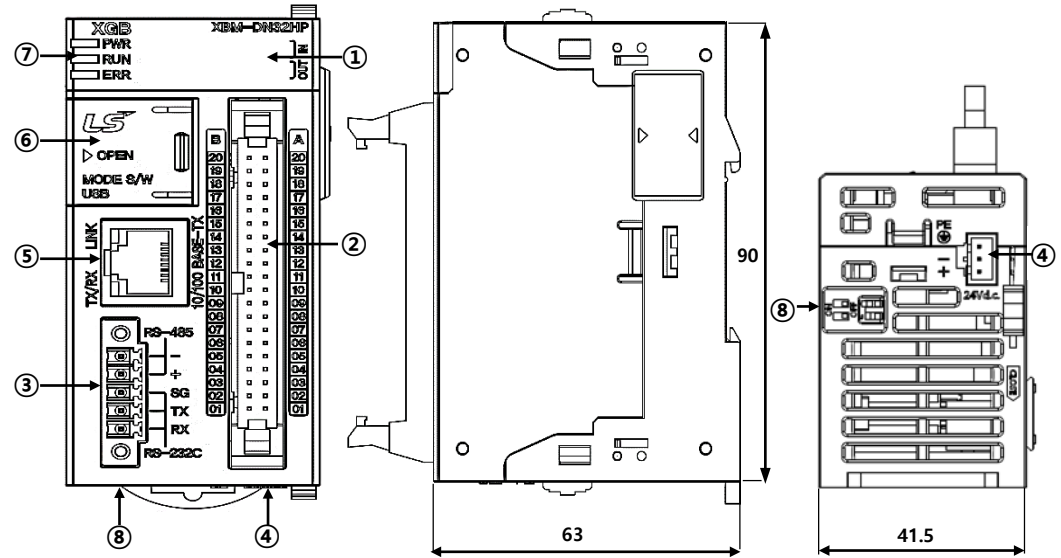
## 5 Accessory

■ Check the component in package.

- 1) XGB-POWER(3P) : Power cable for connecting 24V
- 2) USB-301A : USB connect (download) cable
- 3) C40HH-□□SB-XBI : Main unit input/output connection
- 4) XTB-40H(TG7-1H40S) : Main unit input/output Terminal block

■ This is front part of the CPU. Refer to each name when driving the system. For more information, refer to user manual.

## 6 Parts name and Dimension (mm)



- ① Input/ Output indicator LED
- ② Input/ Output connector
- ③ Built-in RS-232/485 connecting connector
- ④ Power connector
- ⑤ Built-in Enet connecting connector
- ⑥ Mode S/W Cover
- ⑦ Status indicator LED
- ⑧ Termination Resistor Switch

## 7 Mounting & Installation

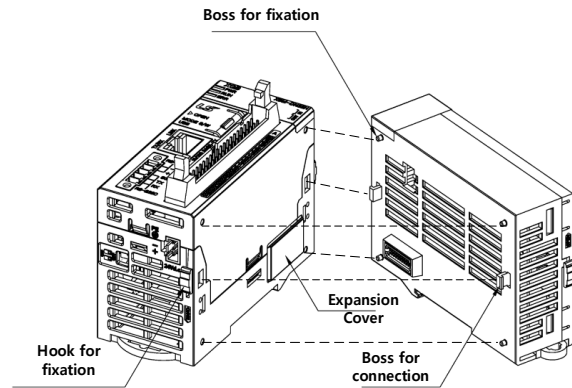
■ Here describes the method to attach and detach each product.

1) Attachment of product

- ① Eliminate the Extension cover at the right-bottom side of the product.
- ② Push the product and connect it in agreement with Hook for fixation of four edges and Hook for connection at the bottom.
- ③ After connection, push down the Hook for fixation and fix it completely.

2) Detachment of product

- ① Push up the Hook for connection and then detach the product with two hands. (Do not detach the product by force.)



## 8 Power specification

■ Here describes the Power specification of XGB, For more information refer to user manual.

Items	Specification
Rated voltage	DC24V
Input voltage range	DC20.4~28.8V (-15%, +20%)
Input current	1A (Typ.550mA)
Permitted momentary power failure	Less than 1ms

## 9 Warranty

■ Warranty period

- 18 months after the production date.

■ Scope of Warranty

18-month warranty is available except:

- 1) The troubles caused by improper condition, environment or treatment except the instructions of LS ELECTRIC.
- 2) The troubles caused by external devices
- 3) The troubles caused by remodeling or repairing based on the user's own discretion.
- 4) The troubles caused by improper usage of the product
- 5) The troubles caused by the reason which exceeded the expectation from science and technology level when LS ELECTRIC manufactured the product
- 6) The troubles caused by natural disaster

■ Change in specifications

Product specifications are subject to change without notice due to continuous product development and improvement.

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