

Autonics

Graphic Panel GP-2480

M A N U A L



Thank you very much for selecting Autonics products.
For your safety, please read the following before using.

Caution for your safety

- Please keep these instructions and review them before using this unit.
- Please observe the cautions that follow;
 - Warning** Serious injury may result if instructions are not followed.
 - Caution** Product may be damaged, or injury may result if instructions are not followed.
- The following is an explanation of the symbols used in the operation manual.
 - caution** : Injury or danger may occur under special conditions.

Warning

- Do not make touch switch of GP control the emergency stop switch related with safety of machinery. Please make these as separately.**
It may cause fire, human injury or property loss.
- Design the system not to cause any malfunction if there is a communicational obstacle between GP and host control device.**
It may cause fire, human injury or property loss.
- Do not use for the device requiring high degree of safety and reliability. (Example : Nuclear power control mechanism, medical device, aircraft controller, combustion apparatus etc.)**
It may cause fire, human injury or property loss.
- It is required to install fail-safe device for reliability when it using in railroad, vehicles, vessel, various safety device, security/emergency device, medical device.**
It may cause fire, human injury or property loss.
- Do not connect, inspect or repair when power is on.**
It may cause an electric shock or a fire.
- Do not disassemble the case. Please contact us if it is required.**
It may cause an electric shock or a fire.
- Please use the rectified power with insulation trans.**
It may cause an electric shock or a fire.
- Do not use the power exceeded the rated voltage.**
It may cause an electric shock or a fire.
- Lithium battery is used in this product, do not disassemble or burn up.**
It may cause an explosion or a fire.
- Wire properly after check power terminal polarity.**
It may cause a fire or a malfunction.

Caution

- The ground wire of GP should be grounded separately with other device wire. The ground resistance should be less than 100Ω, please use the wire over min.1.25mm² of cross sectional area.**
It may cause an electric shock or a malfunction.
- Please check the pin number to connect into GP communication port.**
It may cause a fire or a malfunction.
- Please tighten bolt on terminal block with specified tightening torque.**
It may cause a short circuit, fire or a malfunction.
- When liquid crystal from the broken LCD is smeared with skin, wash it for 15 minutes. If it is gotten in the eye, wash it for 15 minutes and contact with the medical specialist for more information.**
- Do not inflow dust or wire dregs into the unit.**
It may cause a fire or a malfunction.
- In cleaning unit, do not use water or an oil-based detergent and use dry towels.**
It may cause an electric shock or a fire.
- Please separate as an industrial waste when disuse this unit.**
- Note that this device is KCC certified for commercial use. Make proper applications for the product.**

*The above specifications are changeable at anytime without notice.

Features

Graphic Panel GP-2480 is a graphic interface device to monitor parameters of controllers as PLC and display it on a graphic viewer.

- Online software upgrade**
If there is any change or improvement of GP firmware, GP Editor, protocol, language and font, it is enable to visit our website (www.autonics.co.kr) and download.
 - GP firmware
 - GP Editor
 - Protocol
 - Language and font
- Heterogeneous controllers communication**
It is enable to connect two different controllers into serial port separately and GP-2480 monitors two controllers simultaneously and displays the communication between them.
- Multi-monitoring**
Same and multiple controllers can be connected into PLC2 connection port.
- Multilingual support**
It provides English and Korean versions and additional languages will be supported soon.
- Multi-font support**
It provides various bitmap and user-selected fonts.
- Multi communication port**
It designates the device(PLC/PC/PRINTER/BARCODE) connected into RS232C and RS422 serial ports as software depending on the communication type of the device.
- Device monitoring**
It enables to monitor connectable controller device in main system without graphic design data.
- Printer and barcode reader connection**
It enables to print alarm history connecting into the printer and read barcode connecting into barcode reader.
- Touch interface**
It enables to operate GP by touch switches on a front viewer.
- Slim size**
Its 38mm of slim design provides space-efficient solution.
- Various display function**
It displays data by various tags.

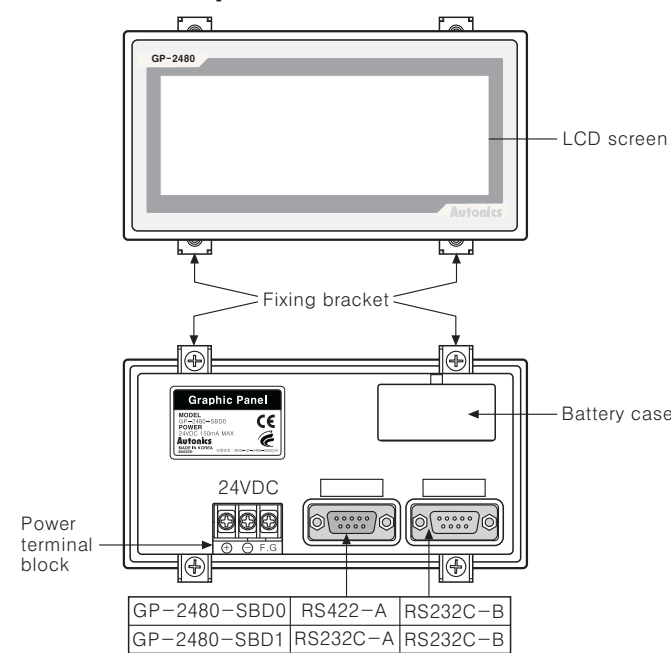
Ordering information

GP - 2480 - SB D 0	0	RS232C, RS422 ports
	1	2 RS232C ports
	D	24VDC
	SB	STN BLUE
	2480	240×80 dot
	GP	Graphic Panel

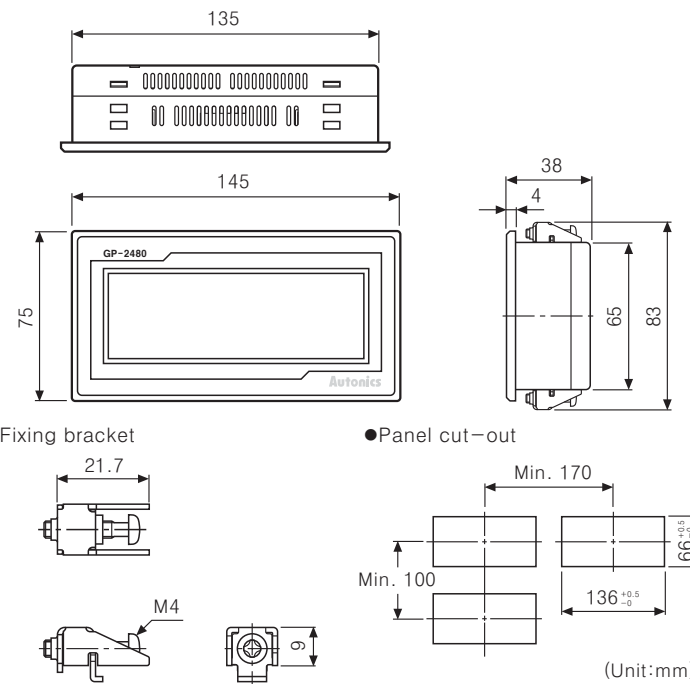
Specifications

Model	GP-2480-SBD0	GP-2480-SBD1
Power supply	24VDC ±10%	
Power consumption	3.6W(Max.)	
LCD type	STN Blue Negative	
Resolution	240×80 dot	
Display area	112.78mm×37.58mm	
Color	Mono(Blue, White)	
Backlight	White LED	
Brightness	Adjustable by software	
Language	English, Korean	
Text	<ul style="list-style-type: none"> High resolution display up to 400 letters 6×8, 8×8 ASCII character, High quality view of numbers 8×16 ASCII characters, 16×16 regional characters (1-8 times bigger for width, 0.5-5 times bigger for height) 	
Graphic drawing memory	512kB	
Number of user screen	500pages	
Serial interface	RS232C, RS422 ports	2 RS232C ports
Touch switch	Width 15×Height 4=60	
Battery life cycle	3 years at 25°C (Alarm for low battery warning)	
Ambient temperature	0 ~ 50°C (at non-freezing status)	
Storage temperature	-20 ~ 60°C (at non-freezing status)	
Ambient humidity	35~85%RH (at non-dew status)	
Insulated resistance	Min.100MΩ (at 500VDC)	
Ground	3rd grounding(Max.100MΩ)	
Noise strength	The square wave noise (Pulse width 1μs) by the noise simulator with ±1000V R/S phase and repetition frequency 60Hz	
Dielectric strength	500VAC(50/60Hz) for a minute	
Vibration	Mechanical	0.75mm amplitude at frequency of 10~55Hz (for a minute) in each of X, Y, Z directions for an hour
	Malfunction	0.5mm amplitude at frequency of 10~55Hz (for a minute) in each of X, Y, Z directions for 10 minutes
Protection ratings	IP65F for front panel	
Accessory	Fixing bracket : 4pcs, Rubber waterproof ring, Battery included	
Approval	CE	
Unit weight	Approx.300g	

Parts description

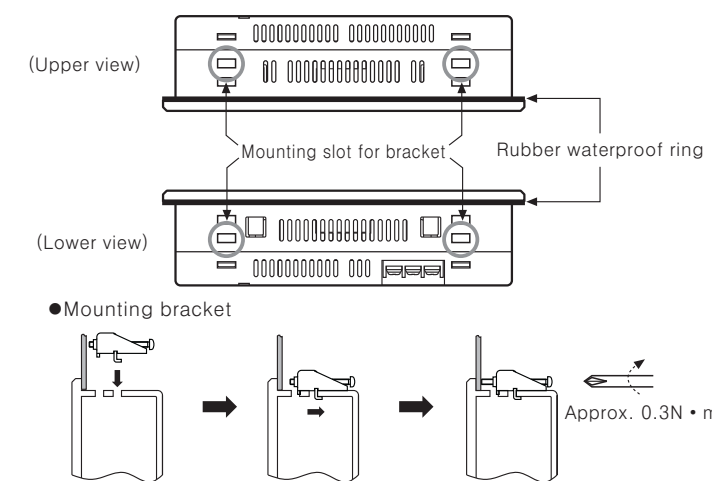


Dimensions



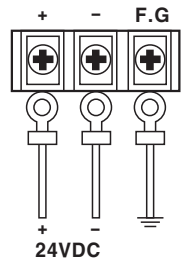
Installation

- Set a rubber waterproof ring in GP.
- Set GP in panel.
- Set brackets in 4 bracket slots and fix them.



Power wiring

- Use a power line with at least 0.75mm² and a ground line with at least 1.25mm² of cross sectional area.
- Use crimp-on type ring terminal with at least 3mm of internal diameter and less than 6mm of external diameter.
- Do not apply power before power line connection.
- Check power polarity.
- Tighten terminal screw as 0.5~0.8N·m torque.
- Ground resistance should be less than 100Ω and ground it separately.



Serial interface

- All devices connectable into GP including PC, PLC, Serial printer, barcode reader and dedicated connectors can be connected into both RS232C and RS422 ports.
- See "GP-2480 user manual" for proper connection in system configuration of GP and "GP-2480 Communication manual" for external device connection such as PLC.

Port	Pin	Port	Pin
RS232C-A, RS232C-B	1	RS422-A	1
	2		2
	3		3
	4		4
	5		5
	6		6
	7		7
	8		8
	9		9

Software(GP Editor)

Please visit our website (www.autonics.co.kr) and download software and manual.
<Computer specification for using software>

Item	Minimum specification	Recommended specification
System	Pentium II	Min. Pentium III
Memory	64MB	Min. 128MB
Hard disk	Over 50MB of available space	Over 100MB of available space
Resolution	800×600	Min. 800×600
Operating system	Windows 98/NT/2000/Me/XP	

Manual

- GP user manual**
See the "GP user manual" for more information about design screen data using GP Editor and instructions of GP.
- Communication manual**
See the "Communication manual" for more information about serial connection of external device, such as PLC.

Battery replacement

Please contact out distributor to replace battery.
It may cause an explosion or a fire when improper battery is used.

Cable

- Transmission cables connectable into external devices such as PLC are sold separately.
- Please visit our website (www.autonics.co.kr) and download transmission cable specifications.

Precaution for using

- Do not press touch panel with hard and sharp object.
- Please store the device in a place with recommended temperature range, or LCD panel can be damaged.
- Please check pin no. in "Communication manual" for connecting communication port.
- Do not close ventilating opening of this product.
- Do not use or store in a place with direct ray of light or dust.
- Do not use or store in a place with shock or vibration.

*Please keep the above precautions to avoid malfunction and damages.

Major products

- Proximity sensors
- Photoelectric sensors
- Area sensors
- Fiber optic sensors
- Door/Door side sensors
- Pressure sensors
- Counters
- Timers
- Rotary encoders
- Display units
- Power controllers
- Sensor controllers
- Panel meters
- Graphic/Logic panels
- Temperature controllers
- Tachometer/Pulse(Rate) meters
- Temperature/Humidity transducers
- Switching power supplies
- Stepping motors/drivers/motion controllers
- Field network devices
- Laser marking system (CO₂, Nd:YAG)
- Laser welding/soldering system

Autonics Corporation
<http://www.autonics.com>

Satisfiable Partner For Factory Automation

HEAD QUARTERS :
41-5, Yongdang-dong, Yangsan-si, Gyeongnam, 626-847, Korea

OVERSEAS SALES :
Bldg. 402 3rd Fl., Bucheon Techno Park, 193, Yakdae-dong, Wonmi-gu, Bucheon-si, Gyeonggi-do, 420-734, Korea
TEL:82-32-610-2730 / FAX:82-32-329-0728

E-mail : sales@autonics.com

The proposal of a product improvement and development : product@autonics.com