# GP-S044

## 38mm Slim Design, Touch Screen, and Better Reliability
### Graphic Panel, GP-S044

### ◼ Features

**4.4 inch
MONO**

- Displays max. 400 characters
- Enables to save max. 500 pages of user screen
- Easy software upgrade available on website
  - (1) GP firmware file
  - (2) GP Editor (drawing program)
  - (3) Additional protocol
- Different devices monitoring function
  - : Allows to monitor and control the variables of additionally connected controllers (such as PLC) with external communication port
- Supports multilingual
  - : Supports Korean, Japanese, English, Chinese, Russian, Vietnamese and Portuguese. Additional languages will be available by firmware.
- Supports multi-font
  - : It provides various bitmap and user-selected fonts.
- Various multi-communication port
  - : Both RS232C 2 port and RS232C/RS422 compound port are provided.
- Device monitoring function
  - : It enables to monitor GP devices and connected controller devices by GP without graphic design data.
- Printer and barcode reader connection
  - : It enables to print alarm history connecting a printer and read barcode connecting a barcode reader.
- Compact design
- Various display function
  - : It displays data by various tags.
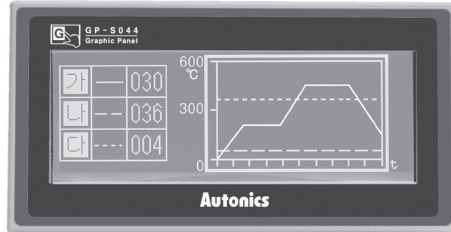
⚠ **Please read "Safety Considerations" in instruction manual before using.**

CE KC

※**GP-S044 Series is a replacement of GP-2480 Series, discontinued product.**

### ◼ Manual

For the detail information and instructions, please refer to user manual and user manual for communication, and be sure to follow cautions written in the technical descriptions (catalog, homepage).
Visit our homepage (www.autonics.com) to download manuals.

- **GP Editor user manual**
  It describes how to write screen data, and is about related usage of GP-S044 HMI function.
- **GP, LP user manual for communication**
  It describes connection for external devices such as PLC.
- **GP-S044/S057 user manual**
  It describes general information on the installation and usage of GP-S044 and system contents.

### ◼ Ordering Information

| Model | Item | Series | Monitor size | Display unit | Color | Power supply | Interface |
|---|---|---|---|---|---|---|---|
| **GP-S044-S1D0** | Graphic panel | S series | 4.4 inch | STN LCD | MONO (blue, white) | 24VDC | Each port of RS232C, RS422 |
| **GP-S044-S1D1** | | | | | | | Two ports of RS232C |

**Autonics**

## ■ Specifications

| Model | GP-S044-S1D0 | GP-S044-S1D1 |
|---|---|---|
| Power supply | 24VDC⎓ | |
| Allowable voltage range | 90 to 110% of power supply | |
| Power consumption | Max. 3.6W | |
| Display performance — LCD type | 4.4 inch STN Blue Negative | |
| Display performance — Resolution | 240×80 dots | |
| Display performance — Display area | 112.8×37.6mm | |
| Display performance — Color | MONO (blue, white) | |
| Display performance — LCD view angle | Top/Bottom/Left/Right within 30° in each direction | |
| Display performance — Backlight | White LED | |
| Display performance — Brightness | Adjustable by software | |
| Graphic drawing performance — Language[※1] | English, Korean, Japanese, Chinese, Russian, Vietnamese, Portuguese | |
| Graphic drawing performance — Text | • High resolution display up to 400 letters (6×8 font)<br>• 6×8, 8×8 ASCII characters, high definition numbers<br>• 8×16 ASCII characters, 16×16 character by each country<br> (1-8 times bigger for width, 0.5-5 times bigger for height) | |
| Graphic drawing performance — Graphic drawing memory | 512 KB | |
| Graphic drawing performance — Number of user screen | 500 pages | |
| Graphic drawing performance — Touch switch | Width 15×Height 4 = 60 | |
| Serial interface | Each port of RS232C, RS422 (asynchronous method) | Two ports of RS232C (asynchronous method) |
| Real-time controller | RTC embedded | |
| Battery life cycle | Approx. 3 years at 25℃ | |
| Insulation resistance | Over 100MΩ (at 500VDC megger) | |
| Ground | 3rd grounding (max. 100Ω) | |
| Noise immunity | ± 0.5kV the square wave noise (pulse width: 1μs) by the noise simulator | |
| Dielectric strength | 500VAC (50/60Hz) for 1 min | |
| Vibration — Mechanical | 0.75mm amplitude at frequency of 10 to 55Hz (for 1 min) in each X, Y, Z direction for 1 hour | |
| Vibration — Malfunction | 0.5mm amplitude at frequency of 10 to 55Hz (for 1 min) in each X, Y, Z direction for 10 min | |
| Shock — Mechanical | 300m/s² (approx. 30G) in each X, Y, Z direction for 3 times | |
| Shock — Malfunction | 100m/s² (approx. 10G) in each X, Y, Z direction for 3 times | |
| Environment — Ambient temperature | 0℃ to 50℃, storage: -20℃ to 60℃ | |
| Environment — Ambient humidity | 35 to 85% RH, storage: 35 to 85% RH | |
| Protection structure | IP65 (front panel, IEC standard) | |
| Accessory | Fixing bracket: 4, waterproof rubber ring, battery (included) | |
| Approval | CE ⓚ | |
| Weight[※2] | Approx. 413g (approx. 284g) | |

※1: Supported language can be added.  ※2: The weight includes packaging. The weight in parenthesis is for unit only.
※Environment resistance is rated at no freezing or condensation.

## ■ Functions

| | | |
|---|---|---|
| Figure display | | Line, rectangle, circle, text, bitmap |
| Tags | Numeral display | Displays the designated device as numerical value. (decimal, hexadecimal, octal, binary, real number) |
| | ASCII display | Displays the designated device value as ASCII character. |
| | Time display | Displays current time or date. |
| | Alarm history | Registers alarm history. |
| | Alarm list | Displays generated (not recovered) alarm. |
| | Comment display | Displays the designated comment as device status or value. |
| | Lamp | Displays lamp as device status. |
| | Part display | Displays the designated parts as device status and value. |
| | Line graph | Displays several device values with a graph of broken line. |
| | Trend graph | Displays change of device value for time with a graph of broken line. |
| | Bar graph | Displays a device value with a bar graph. |
| | Statistic graph | Displays a ratio of several device values with pie graph. |
| | Panel meter | Displays a device value as panel meter. |
| | Touch key | Screen is switched, word/bit device values are set when it touched. |
| | Numeral input | Configures user input value in device. |
| | ASCII input | Configures user input ASCII code value in device. |
| System information function | | Monitors/Controls GP operation from PLC. |
| Recipe function | | Reads/Writes several PLC device collectively. |
| Security function | | Only acceptable user can observe/operate important data. |
| Barcode read function | | Connects barcode reader, read barcode. |
| Floating alarm function | | Warning message is floated when alarm is generated. |
| Time operation | | Specific bit device is ON/OFF for designated day and time. |
| Overlap window | | Available to form dynamically overlapping another base screen on the base one. |
| Observe status function | | Changes PLC device status/value of PLC when trigger is generated. |

# GP-S044

## ▣ Dimensions

(unit: mm)

135

145

75

4  34

65  83

● **Panel cut-out**

Min. 170

Min. 100

$66^{+0.5}_{-0}$

$136^{+0.5}_{-0}$
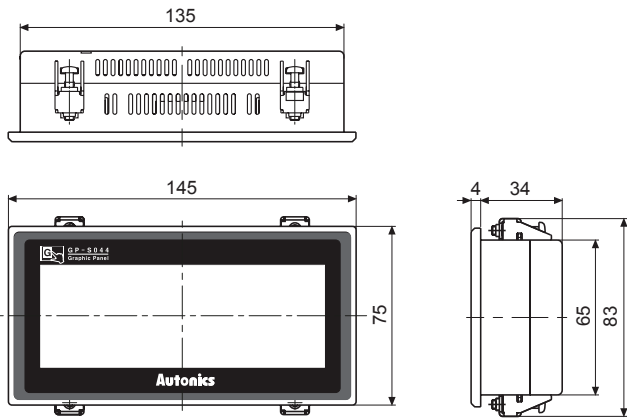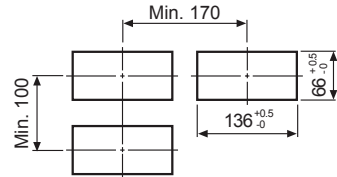
※Panel thickness: max. 4mm

● **Fixing bracket**

M4 BOLT  12

9

21.7

## ▣ Unit Description

GP-S044
Graphic Panel

Autonics

LCD screen

Fixing bracket

Graphic Panel
MODEL
GP-S044-S1D0
POWER
24VDC 100mA MAX
Autonics
MADE IN KOREA

Battery case

24VDC

Power terminal block

Communication port A※1
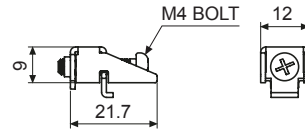
Communication port B※1
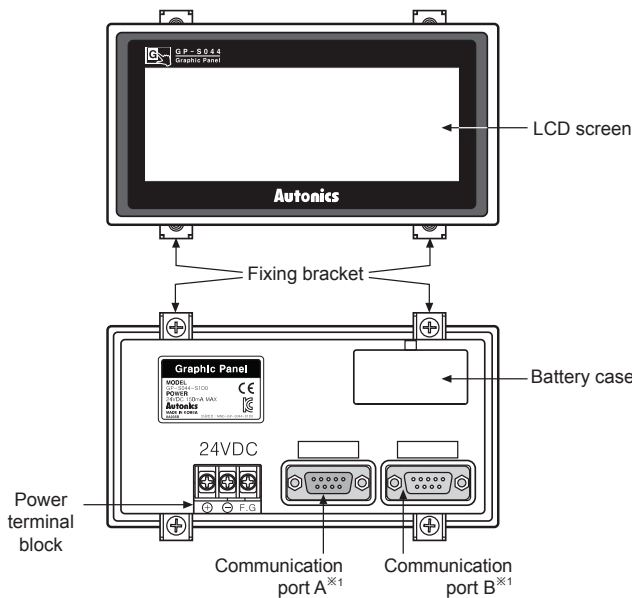
※1: Communication port

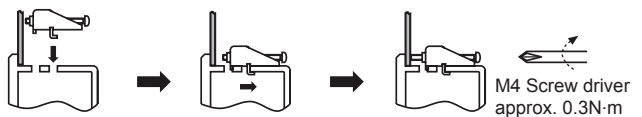| Model | Communication port | Port A | Port B |
|---|---|---|---|
| GP-S044-S1D0 | | RS422 | RS232C |
| GP-S044-S1D1 | | RS232C-A | RS232C-B |

※For more information, refer to '▣ Serial Interface' of GP/LP Common Features.

## ▣ Installation

1. Set a waterproof rubber ring after placing the joining part of the ring under the GP-S044.
2. Adhere closely between each edge of the GP-S044 and the rings.
3. Set GP-S044 in panel.
4. Set the fixing bracket to 4 bracket slots and fix them with the screw of the bracket.

Upper side

Mounting slot for bracket

Waterproof rubber ring

Lower side

● **Fixing bracket**

M4 Screw driver approx. 0.3N·m
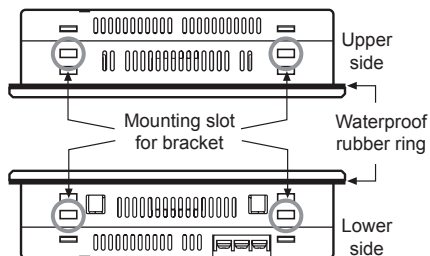
## ▣ Cable (sold separately)

Serial connection cables which connect GP/LP with PLC or other external devices are sold separately.
Refer to "GP/LP Communication Cables".