

# 7 inch Wide Screen, TFT Color LCD Type Graphic Touch Panel GP-S070

## ■ Features

- Adopts 7 inch wide TFT LCD for realizing True Color with 16,777,216 colors
- Analog touch method
  - : Free tag arrangement
- Data logger function
  - : Supports data gathering and backup of controller
- Supports variable image library
- Enables to monitor multi stations and multi channels at the same time
- Supports several interface
  - : Supports USB Host/Device to high speed download and manage files
  - : Easy to connect various external devices with RS232C 2 ports and RS232C/RS422 multi-communication port
- Supports several fonts: Supports window true type and several bitmap fonts (selectable)
- Device monitoring function
  - : Enables to monitor/control variable of connected control through communication port
- Easy S/W upgrade available on website
  - (1) GP firmware file
  - (2) GP Editor (drawing program)
  - (3) Additional protocol
  - (4) Language and font, etc
- Connects printer/barcode reader: Enables to print out alarm history, to read barcode



7 inch TFT Color LCD

Please read "Safety Considerations" in instruction manual before using.



## ■ 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](http://www.autonics.com)) to download manuals.


- **GP Editor user manual**  
It describes how to write screen data, and is about related usage of GP-S070 HMI function.
- **GP, LP user manual for communication**  
It describes connection for external devices such as PLC.
- **GP-S070 user manual**  
It describes general information of the installation and usage of GP-S070 and system contents.

## ■ Ordering Information

| Model        | Item          | Series   | Monitor size | Display unit  | Color            | Power supply | Interface                                     |
|--------------|---------------|----------|--------------|---------------|------------------|--------------|---|
| GP-S070-T9D6 | Graphic panel | S series | 7 inch       | TFT Color LCD | 16,777,216 color | 24VDC        | RS232C, RS422, USB HOST, USB DEVICE, Ethernet |
| GP-S070-T9D7 |               |          |              |               |                  |              | RS232C (2), USB HOST, USB DEVICE, Ethernet    |

- (A) Photoelectric Sensors
- (B) Fiber Optic Sensors
- (C) Door/Area Sensors
- (D) Proximity Sensors
- (E) Pressure Sensors
- (F) Rotary Encoders
- (G) Connectors/ Connector Cables/ Sensor Distribution Boxes/ Sockets
- (H) Temperature Controllers
- (I) SSRs / Power Controllers
- (J) Counters
- (K) Timers
- (L) Panel Meters
- (M) Tacho / Speed / Pulse Meters
- (N) Display Units
- (O) Sensor Controllers
- (P) Switching Mode Power Supplies
- (Q) Stepper Motors & Drivers & Controllers
- (R) Graphic/ Logic Panels
- (S) Field Network Devices
- (T) Software

## ■ Specifications

|                             |  |  |
|-----------------------------|--|--|
| Model                       | <b>GP-S070-T9D6</b>  | <b>GP-S070-T9D7</b>  |
| Power supply                | 24VDC---   |  |
| Allowable voltage range     | 90 to 110% of power supply   |  |
| Power consumption           | Max. 7.2W  |  |
| Display performance         | LCD type   | 7 inch TFT Color LCD   |
|                             | Resolution   | 800×480 dots   |
|                             | Display area   | 152.4×91.44mm  |
|                             | Color  | 16,777,216 color   |
|                             | LCD view angle   | Within each 60°/ 45°/ 60°/ 60° of top/bottom/left/right  |
|                             | Backlight  | White LED  |
|                             | Brightness   | Adjustable by software   |
| Graphic drawing performance | Language※1   | English, Korean  |
|                             | Text   | • Vector font      • 6×8, 8×8 ASCII character, high definition numbers<br>• 8×16 ASCII characters, 16×16 character by each country (1 to 8 times bigger for width, 0.5 to 5 times bigger for height) |
|                             | Graphic drawing memory   | 16MB   |
|                             | Number of user screen  | 500 pages  |
|                             | Touch switch   | Analog touch   |
| Serial interface            | Asynchronous method: each port of RS232C, RS422<br>Each port of RS232C, RS422      Two ports of RS232C |  |
| USB interface               | Each of USB HOST, USB Device (Version 1.1)   |  |
| Ethernet interface          | IEEE802.3 (U), 10/100Base-T  |  |
| Real-time controller        | RTC embedded   |  |
| Battery life cycle          | Approx. 3 years at 25°C  |  |
| 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                                |  |
| Withstanding voltage        | 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   |
|                             | 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/s <sup>2</sup> (approx. 30G) in each X, Y, Z direction for 3 times  |
|                             | Malfunction  | 100m/s <sup>2</sup> (approx. 10G) in each X, Y, Z direction for 3 times  |
| Environ-ment                | Ambient temperature  | 0 to 50°C, storage: -20 to 60°C  |
|                             | Ambient humidity   | 35 to 85% RH, storage: 35 to 85%RH   |
| Protection structure        | IP65 (front panel, IEC standard)   |  |
| Accessory                   | Fixing bracket: 4, battery (included)  |  |
| Approval                    | CE                  |  |
| Weight※2                    | Approx. 680g (approx. 500g)  |  |

※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.

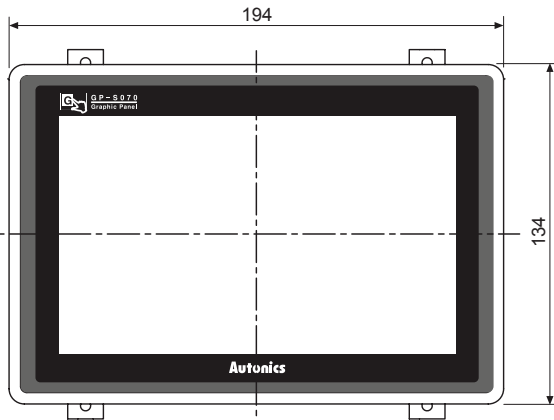
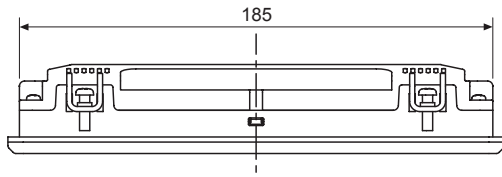
## ■ Functional Description

|                             |  |   |
|-----------------------------|--|---|
| 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 backed up) 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.              |   |

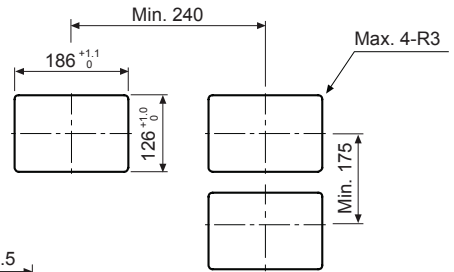
# Graphic Panel

## ■ Dimensions

(unit: mm)

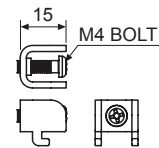


### ● Panel cut-out

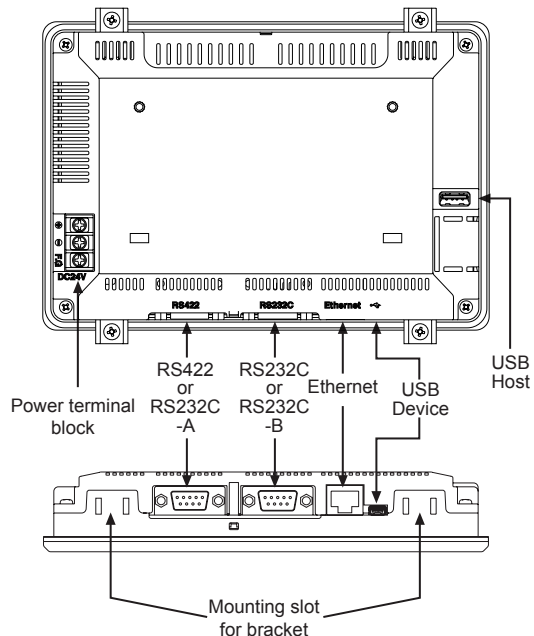
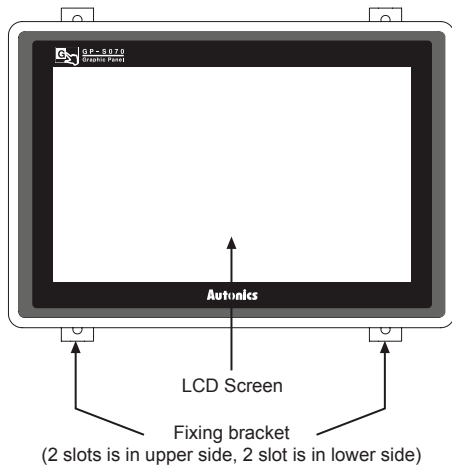


※Panel thickness  
: max. 4mm

### ● Fixing bracket



## ■ Unit Description



- Ethernet Port: For connecting LAN cable and hub, use direct cable, and for connecting PC directly, use cross cable.
- USB Device: When setting USB Device mode to HID mode in serial setting, it is for uploading/downloading GP Editor project. When setting to Storage mode, it is for transferring/coping data between PC and GP-S070 with recognition as a storage device by PC.  
For details, please refer to 'GP-S070 user manual'.
- USB Host: It is for transferring/coping data between USB storage device and GP-S070 and upgrading firmware.
- RS232C, RS422 ports: For more information, refer to '■ Serial Interface' of GP/LP Common Features.

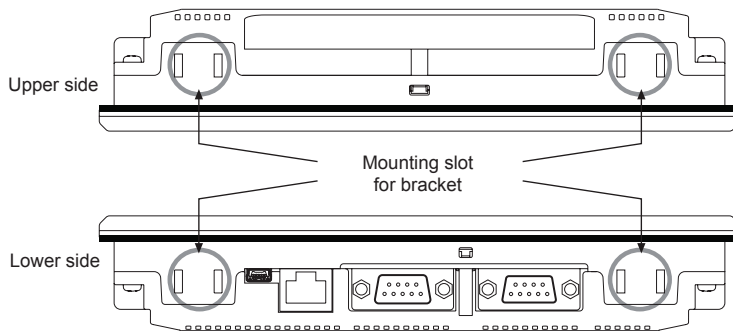
|     |   |
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| (N) | Display<br>Units  |
| (O) | Sensor<br>Controllers   |
| (P) | Switching<br>Mode Power<br>Supplies                                       |
| (Q) | Stepper Motors<br>& Drivers<br>& Controllers                              |
| (R) | Graphic/<br>Logic<br>Panels   |
| (S) | Field<br>Network<br>Devices   |
| (T) | Software  |

# GP-S070

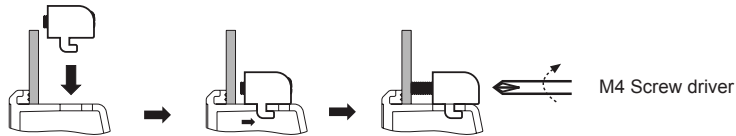
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## ■ Installation

1. Set GP-S070 in panel.
2. Set fixing brackets in 4 slots (2 slots is in upper side, 2 slots is in lower side).



3. Tighten fixing bracket with M4 Screw driver and tightening torque is 0.3 to 0.5N·m.



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## ■ 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".