

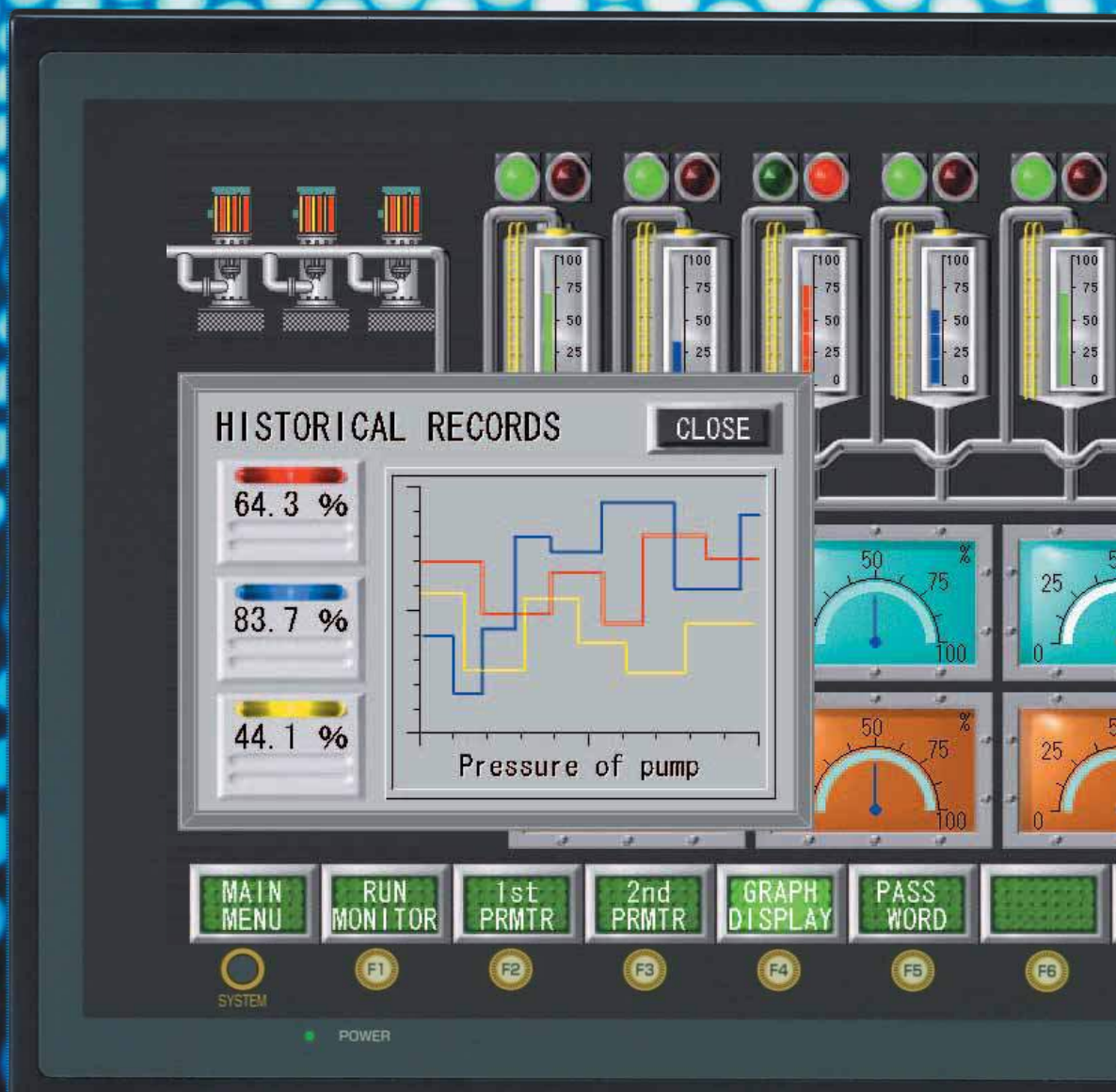
Panasonic

ideas for life





Programmable Display

GV Series

Reborn with new features and support
for even large-scale production equipment!



GV Series Selector Chart

| Item |  |  |  |  |
|--------------------------------------|---|---|---|---|
| Product name | GV42C | GV52C | GV52S | GV62S |
| Screen size | 7.7 inch | 10.4 inch | | 12.1 inch |
| Display | STN color LCD | TFT color LCD | | |
| Resolution (W × H dots) | 640 × 480 (VGA) | | 800 × 600 (SVGA) | |
| Display color | 128 colors | | 32,768 colors and 16 blink colors | |
| Backlighting | Cold cathode tube | | | |
| Replacement backlight | Possible | | | |
| Touch key | Analog type | | | |
| Touch key resolution (W × H) | 1024 × 1024 | | | |
| Function switch | 8 pcs. | | | |
| True-type font display | Available | | | |
| Multi-language | English, European, Simplified Chinese, Korean and Japanese | | | |
| Compatible PLCs | Matsushita Electric Works, Mitsubishi, Omron, Siemens, Yokogawa, Toshiba Machine, A-B, Modicon and general-purpose RS232C | | | |
| Network | Ethernet (unit sold separately, used AIGV833) | | Ethernet (10BASE-T comes standard) | |
| Clock functions | Internal | | | |
| Clock data backup | Lithium "coin" battery | | | |
| Memory expansion | Option (Memory expansion cassette) | | | |
| Printer interface | Centronics compliant, bar code printer available, half pitch 20 pins | | | |
| CE marking | Available (Compliant types available.) | | | |
| UL/cUL | Available (Compliant types available.) | | | |
| Screen creation tool | Terminal GVWIN for GV series | | | |
| Through function | — | | | |
| Macro function | Available | | | |
| Dimensions (W × H × D mm inch) | 233.0 × 178.0 × 66.1 9.173 × 7.008 × 2.602 | 303.8 × 231.0 × 72.0 11.961 × 9.094 × 2.835 | | 326.4 × 259.6 × 72.0 12.850 × 10.220 × 2.835 |
| Panel cut dimensions (W × H mm inch) | 220.5 × 165.5 (+0.5) 8.681 × 6.516 (+0.020) | 289.0 × 216.2 (+0.5) 11.378 × 8.512 (+0.020) | | 313.0 × 246.2 (+0.5) 12.323 × 9.693 (+0.020) |
| Body color | Black | | | |
| Operating voltage | 24 V DC | 100 to 240 V AC/24 V DC | | |

GV Series

The features you need, simple and easy to use.

Supports even large-scale production equipment.



CE/UL/cUL

GV42C



CE/UL/cUL

GV52C



CE/UL/cUL

GV52S



CE/UL/cUL

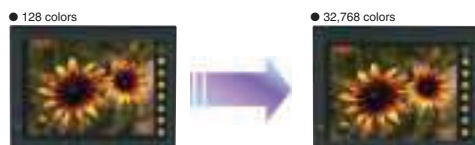
GV62S



Large Programmable Display GV Series

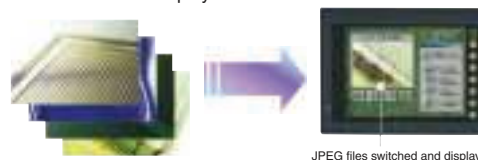
32,768 color, clear, bright display (GV52S and GV62S only)

Being able to display 32,768 colors, all sorts of clear and bright displays are possible. The high resolution display of JPEG and bitmap files is possible as well as the realistic display of parts, or even photographs and illustrations loaded from a digital camera or scanner.



JPEG file display (GV52S and GV62S only)

Previously saved JPEG files can be loaded into a PC and used for document creation. Also, still images clipped from a video camera can be re-displayed.

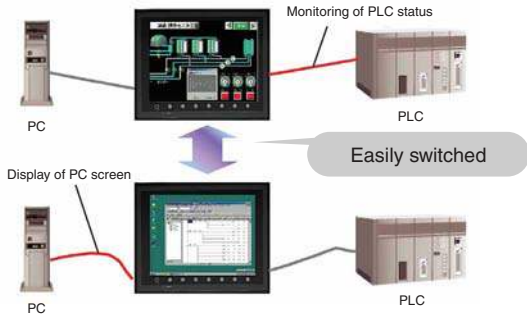


JPEG files switched and displayed

Analog RGB I/O (option, GV52S and GV62S only)

■ Analog RGB input

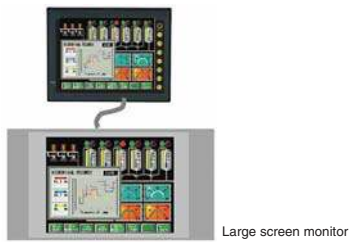
By connecting to a PC, the PC screen can be displayed and the switching of screens is easy.



*An optional unit (AIGV881) is required for analog RGB input.

■ Analog RGB output

GV series screens can be displayed on PC monitors or output to a projector for display on a screen.



*An optional unit (AIGV882) is required for analog RGB output.

Sans serif font display

The fonts can be displayed for smooth and beautiful text display. HA Gothic True-type font can be used.

*When using HA Gothic, you cannot use it together with 16 or 32 dot fonts. Use of the expansion memory cassette (AIGV824) may be necessary depending on amount of remaining memory.

Brightness adjustment (GV52C, GV52S and GV62S only)

With detailed brightness control possible in 128 steps, the display will always be clear and easy to see. Installation is possible in dark areas inside factories or where ambient light fluctuates. (Backlight life will be shortened slightly.)

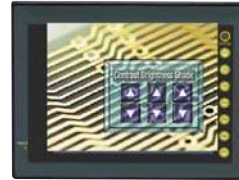


Video display function (option, GV52S and GV62S only)

Operation while viewing a superimposed video is possible. Video also facilitates troubleshooting by being able to load single frame stills using the signal snap function or 16 continuous still frames using the strobe snap function.

*An optional unit (AIGV880) is required to use this function.

● Superimposition



Even with the video screen at full size (640 × 480 dots), the operation screen can be displayed simultaneously on top of it.

Multi-language display

Eight languages, including Japanese, can be input in addition to English. These can be displayed simultaneously or switched with a single touch.



*A CF card is required to enable multi-lingual switching.

Multi-lingual editing

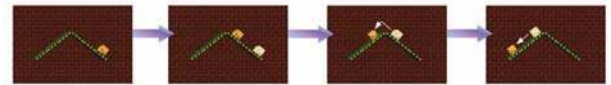
Inputting text is easy because English can be displayed at the same time as other languages.

| 日本語 | 英語 | 中国語 |
|-------------|-----------------|--------|
| このボタンを使用します | Use this button | 请使用此按钮 |
| スイッチをオン/オフ | Switch on/off | 开关按钮 |
| 自動 | MANUAL | 手动 |
| 手動 | MANUAL | 手动 |
| 停止 | STOP | 停止 |
| 式確認 | NEXT | 下一页 |

Animation function (GV52S and GV62S only)

High-resolution animations can be easily created by combining bitmap pictures or pictures drawn by editing dots. Coordinate settings can be easily specified on the screen using a mouse.

● Animation display



Sound playback function

WAV format sound files can be played back by simply connecting a speaker.

Be at ease knowing that errors and other abnormalities will be heard at a distance.

*Optional units (AICV880 to AIGV883) are required to use this function.

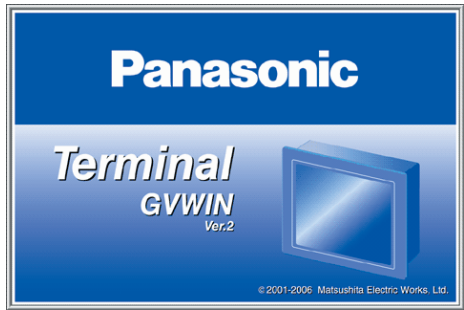


An error has occurred!

Power supply problem!

Screen Creation Tool for The GV Series Terminal **GVWIN**

Our total support philosophy allows you to utilize existing data assets, develop screen data quickly, debug easily, and even facilitates production of your user documentation!



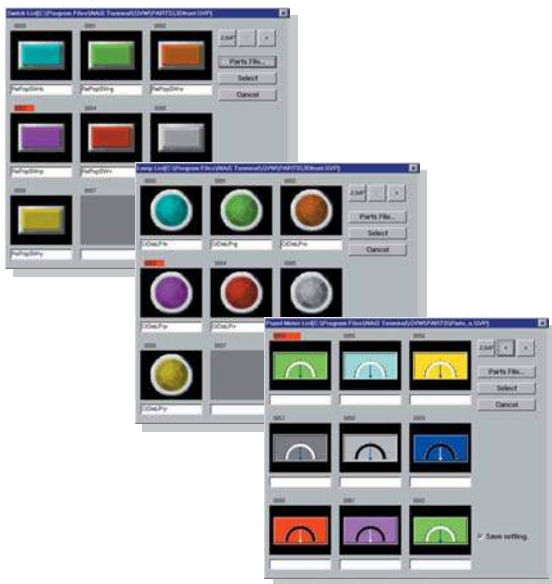
Terminal **GVWIN**

Screen creation tool for the GV Series



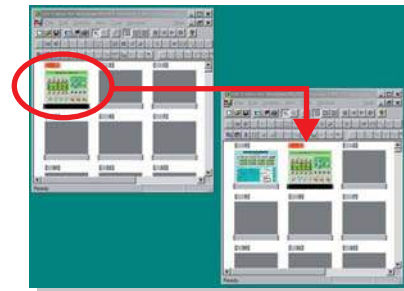
Just paste the parts; it couldn't be simpler!

To build screens select parts such as switches and lamps from our extensive parts files and place them on the screen. Of course, you can also create your own original parts as well.



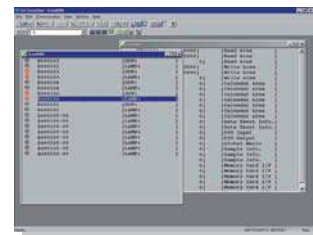
Easy copying of file screens

The Screen Manager makes it very easy to copy of file screens. This makes it easy to use past assets or split up screen creation tasks.



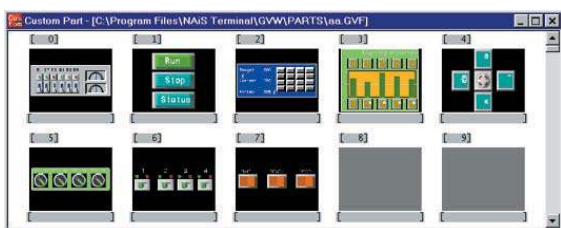
Simulator function

Even without a PLC you can still confirm operation of the GV by connecting it to a personal computer. All you need is a screen data transfer cable.



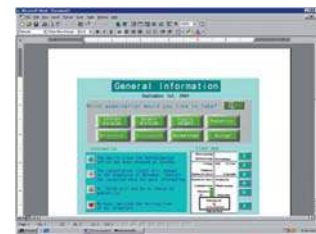
Registering original parts for future use

You can save time by combine parts and graphics and registering them as custom parts to reuse them in the future.



Screen bitmap copy

Screens can be output as bitmaps and for use by other applications. This is convenient when creating instruction manuals for your equipment.



GV Series Specifications

General specifications

| Item | Specifications | | | | |
|---|---|---|--|---|--|
| | GV42C | GV52C/GV52S | | GV62S | |
| | AIGV4020012 | AIGV5320000/AIGV5430000 | AIGV5320012/AIGV5430012 | AIGV6430000 | AIGV6430012 |
| Rated voltage | 24 V DC | 100 to 240 V AC | 24 V DC | 100 to 240 V AC | 24 V DC |
| Power consumption | 15 W max. | 60 VA max. | 30 W max. | 60 VA max. | 30 W max. |
| Permissible momentary power failure | 1 ms or less | 20 ms or less | 1 ms or less | 20 ms or less | 1 ms or less |
| Breakdown voltage | Between external DC power terminal and frame ground: 500 V AC for 1 min. | Between external AC power terminal and frame ground: 1500 V AC for 1 min. | Between external DC power terminal and frame ground: 500 V AC for 1 min. | Between external AC power terminal and frame ground: 1500 V AC for 1 min. | Between external DC power terminal and frame ground: 500 V AC for 1 min. |
| Insulation resistance | 500V DC, 10M Ω or more | | | | |
| Ambient temperature | 0 to +50°C/32 to 122°F | | | | |
| Ambient humidity | 85%RH or less (without dew condensation) | | | | |
| Storage temperature | -10 to +60°C/-50 to 140°F | | | | |
| Vibration resistance | Vibration frequency 10 to 150 Hz, Acceleration: 9.8 m/s ² (1G); Single amplitude: 0.075 mm, 3 directions of X, Y, and Z: 1 hour. | | | | |
| Shock resistance | Pulse shape: sine half wave, peak acceleration: 147 m/s ² (15G), 3 directions of X, Y and Z: six times | | | | |
| Noise immunity | 1500 Vp-p (1 μ s pulse width, 1 ns rise time) noise simulator used. The DC type satisfies EMC standards separately. | | | | |
| Static electricity discharge resistance | IEC1000-4-2 compliant, contact 6 kV, in air 8 kV | | | | |
| Grounding | D-class earth (Class 3 earth) | | | | |
| Protective construction | Front panel: IP65; Rear case: IP20 compliant; Shape: single unit; Installation method: panel imbedded | | | | |
| Cooling system | Cooling naturally | | | | |
| Mass | Approx. 1.5 kg/3.31 lb | Approx. 2.4 kg/5.29 lb | | Approx. 2.7 kg/5.95 lb | |

Display

| Item | Specifications | | | | | | |
|------------------------|--------------------------------------|-------------|-------------|-----------------------------------|------------------|-------------|-------------|
| | GV42C | GV52C | | GV52S | GV62S | | |
| | AIGV4020012 | AIGV5320000 | AIGV5320012 | AIGV5430000 | AIGV5430012 | AIGV6430000 | AIGV6430012 |
| Display | STN color | | | | | | |
| Display color | TFT color | | | | | | |
| Resolution | 128 colors | | | 32,768 colors and 16 blink colors | | | |
| Effective display area | 640 × 480 (VGA) | | 10.4 inch | | 800 × 600 (SVGA) | | 12.1 inch |
| Backlight | Cold cathode tube (user replaceable) | | | | | | |
| Backlight average life | Approx. 40,000 hours | | | Approx. 50,000 hours | | | |
| Auto off function | Continually lit, free setting | | | | | | |
| Contrast adjustment | Set via function switch | | | Not available | | | |

*Adjusted using function switch.

Functions

| Item | Specifications | | | | |
|---------------------|--|----------------------------|---------------------|---------------------|--------------------|
| | Japanese | English, European | Traditional Chinese | Simplified Chinese | Korean |
| Display languages | Japanese | English, European | Traditional Chinese | Simplified Chinese | Korean |
| Display characters | 1/4 size, 1/2 size | ANK code | Latin1 | ASC II code | ASC II code |
| | Full size 16 dots | JIS#1 and #2 TrueType font | — | Traditional Chinese | Simplified Chinese |
| | Full size 32 dots | JIS#1 TrueType font | — | — | — |
| Type of lines | 6 types (fine, thick, dot, chain, broken, 2-dot chain) | | | | |
| Tile patterns | 16 types (incl. user-definable 8 types) | | | | |
| Display property | Always on, blinking, reverse video, reverse video blinking | | | | |
| Display color | 32,768 colors and 16 blink colors (GV42C: 128 colors and 16 blink color) | | | | |
| Color specification | Foreground, background boundaries (line) | | | | |
| Screen creation | Special purpose software application: Terminal GVWIN (Windows version) | | | | |

Touch key

| Item | Specifications |
|--------------------------|-----------------------------------|
| Form | Analog resistance film form |
| Mechanical lines | 10 ⁶ cycles or more |
| Screen treatment process | Hard coat, non glare treatment 5% |

Function switch

| Item | Specifications |
|--------------------|--------------------------------|
| Number of switches | 8 |
| Form | Pressure sensitive switches |
| Mechanical life | 10 ⁶ cycles or more |

GV Series Types

Main units

| Product name | Specification | Product No. |
|--------------|---|-------------|
| GV42C | 7.7 inch STN/DC/CE/UL compliant product | AIGV4020012 |
| GV52C | 10.4 inch TFT/SVGA/AC/CE/UL compliant product | AIGV5320000 |
| | 10.4 inch TFT/SVGA/DC/CE/UL compliant product | AIGV5320012 |
| GV52S | 10.4 inch TFT/SVGA/AC/CE/UL compliant product | AIGV5430000 |
| | 10.4 inch TFT/SVGA/DC/CE/UL compliant product | AIGV5430012 |
| GV62S | 12.1 inch TFT/AC/CE/UL compliant product | AIGV6430000 |
| | 12.1 inch TFT/DC/CE/UL compliant product | AIGV6430012 |

Screen creation tool

| Product name | Specification | Product No. |
|----------------|---|-------------|
| Terminal GVWIN | Screen creation tool software CD-ROM English version (with paper manual) | AIGV801 |
| | Screen creation tool software CD-ROM English version (without paper manual) | AIGV8010 |

Interface unit

| Product name | Specification | Product No. |
|---------------------|---|-------------|
| Terminal converter | RS422/485 converter for connecting to PLC | AIGV830 |
| Dual port interface | Mitsubishi CPU dual port interface | AIGV831 |
| Communication unit | CC-Link communication unit | AIGV832 |
| | Ethernet communication unit | AIGV833 |
| | Profibus communication unit | AIGV834 |

Installable units

| Product name | Specification | Product No. |
|-----------------------------------|--|-------------|
| Video input and sound output unit | Video input: 4 channels; sound output: 1 channel | AIGV880 |
| RGB input and sound output unit | RGB input: 1 channel; sound output: 1 channel | AIGV881 |
| RGB output and sound output unit | RGB output: 1 channel; sound output: 1 channel | AIGV882 |
| Sound output unit | Sound output: 1 channel | AIGV883 |

Card recorder

| Product name | Specification | Product No. |
|---------------|---------------|-------------|
| Card recorder | — | AIGV850 |

Memory

| Product name | Specification | Product No. |
|-----------------|---------------|-------------|
| Expansion F-ROM | 8 MB | AIGV824 |
| Expansion SRAM | 512 KB | AIGV825 |

Screen protection sheets

| Product name | Specification | Product No. |
|---|---|-------------|
| Screen protection sheet for the GV62S | 12.1 inch. Screen protection sheet (non-glare type), 5 pcs. | AIGV6833 |
| Screen protection sheet for the GV52C/GV52S | 10.4 inch. Screen protection sheet (non-glare type), 5 pcs. | AIGV5834 |
| Screen protection sheet for the GV42C | 7.7 inch. Screen protection sheet (non-glare type), 5 pcs. | AIGV4835 |

Cable

| Product name | Specification | Product No. |
|-----------------------|---|-------------|
| Printer cable | 2.5 mm/9.202 ft | AIGV890 |
| Screen transfer cable | 3 mm/9.843 ft | AIGV8103 |
| PLC connecting cable | For connection to tool port of Matsushita Electric Works FP0, FPΣ, FP2, FP2SH or FP-M | AFC8513 |
| | For connection to COM. port of Matsushita Electric Works FP1, FP2, FP2SH, FP-M or FP10SH For connection to CCU of Matsushita Electric Works FP2 or FP3 | AFB85813 |

Replacement battery

| Product name | Specification | Product No. |
|---------------------|---------------|-------------|
| Replacement battery | — | AIGV841 |

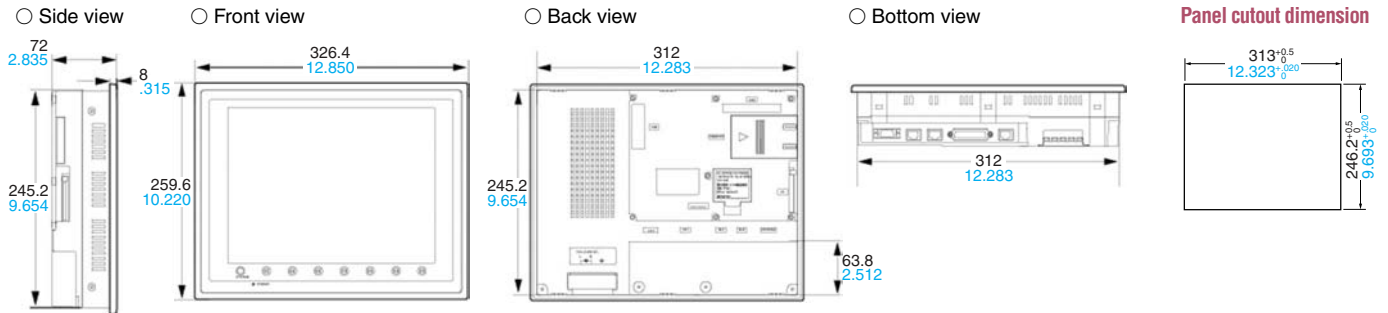
Replacement Backlight

| Product name | Specification | Product No. |
|---------------------------|---|-------------|
| Backlight for GV62S | Backlight for GV62S (12 inch TFT/SVGA) | AIGV6804 |
| Backlight for GV42C | Backlight for GV42C (7 inch STN/VGA) | AIGV4800 |
| Backlight for GV60T | Backlight for GV60T (12 inch TFT/SVGA) | AIGV6804 |
| Backlight for GV50T/GV52C | Backlight for GV50T/GV52C (10 inch TFT/VGA) | AIGV5805 |
| Backlight for GV50C | Backlight for GV50C (10 inch STN/SVGA) | AIGV5800 |
| Backlight for GV40C | Backlight for GV40C (7 inch STN/SVGA) | AIGV4800 |

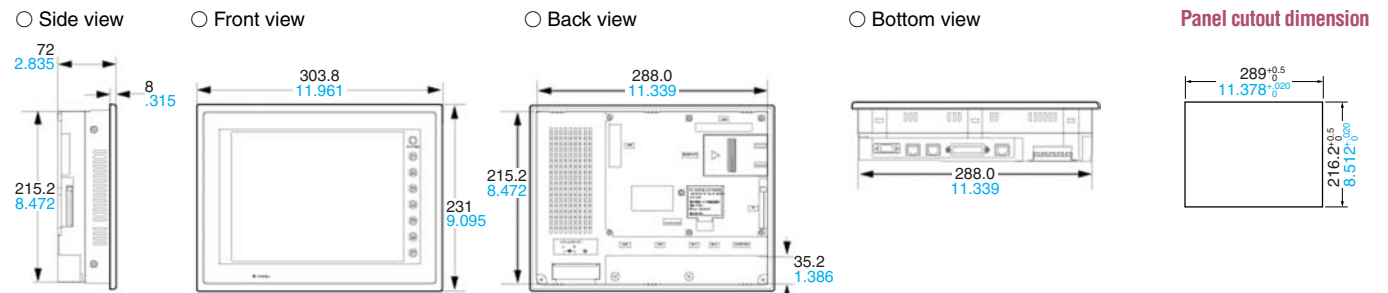
Notes: For GV60T and GV50T, use the following backlights when the hardware version is B or lower.
 Backlight for GV60T: AIGV6801
 Backlight for GV50T: AIGV5802
 For GV50S use the following backlights when the hardware version is a or lower.
 Backlight for GV50S: AIGV5801

GV Series Dimensions

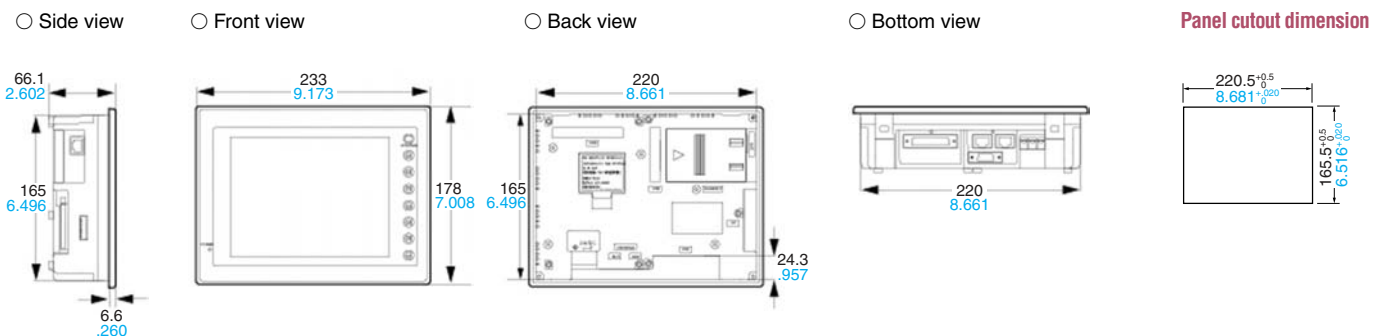
GV62S dimensions (Unit: mm/inch)



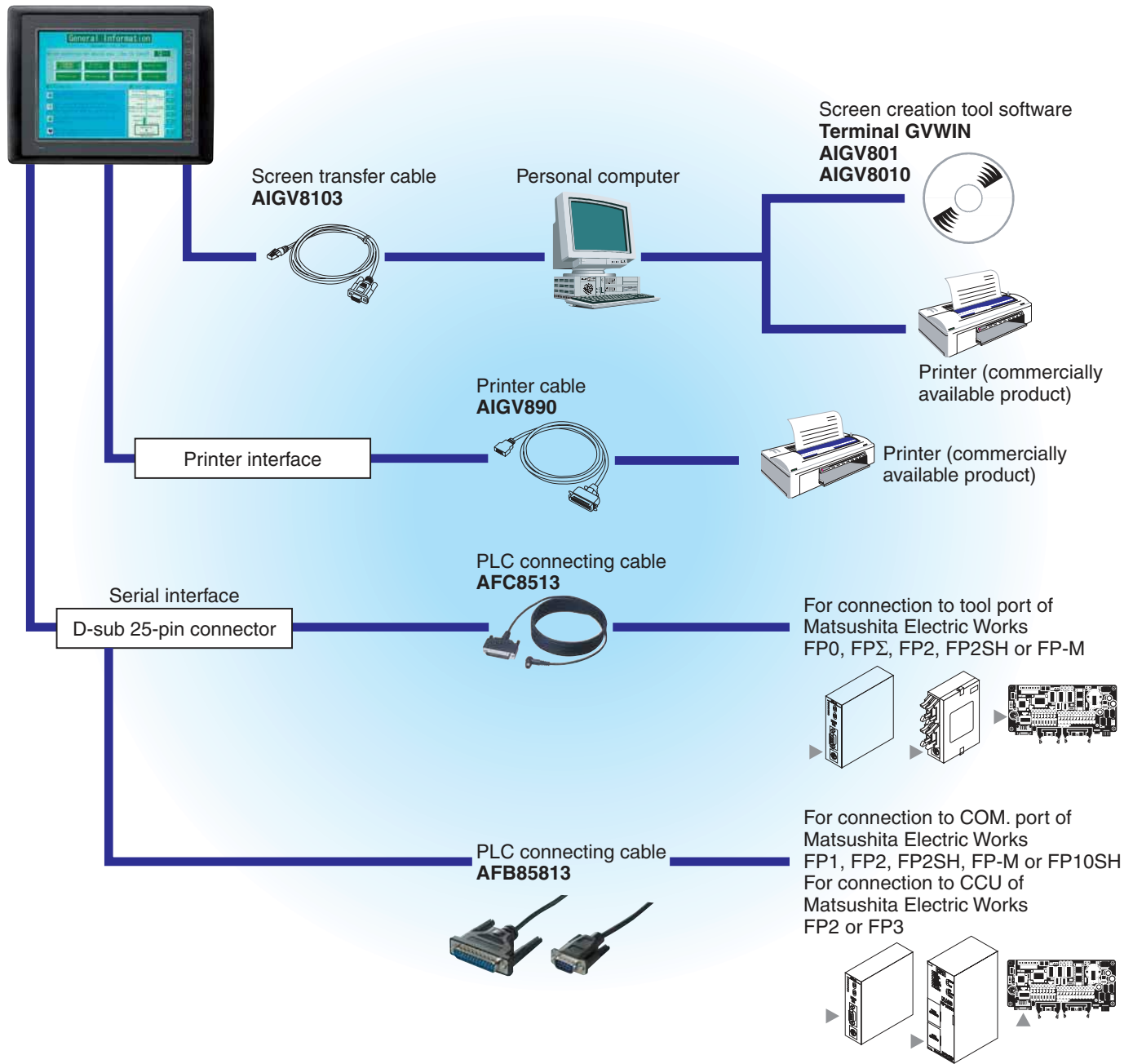
GV52S/GV52C dimensions (Unit: mm/inch)



GV42C dimensions (Unit: mm/inch)



GV Series System Configuration



Please contact

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